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# FINAL REPORT

## Study Title

Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or via Maternal Milk

## Data Requirement

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## Laboratory Project ID

Argus Research Laboratories, Inc., Protocol Number: 1416-003

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## GOOD LABORATORY PRACTICE STATEMENT

This study was conducted according to U.S. Environmental Protection Agency (EPA TSCA) "Good Laboratory Practice Standards; Final Rule" (40 CFR Part 792) with the exception of those portions conducted at Wright Patterson Air Force Base where the TSH, $T_3$, $T_4$ Hormone Analyses and Test Substance Concentration Analyses were performed. These portions of the study were conducted in the spirit of EPA GLPs, and not all portions were found to be compliant during a site inspection of the facility by the Quality Assurance Unit of the Testing Facility. However, the data has been audited for accuracy and compliance by the Quality Assurance Unit of the Testing Facility. Any areas of noncompliance are documented in the study record. No deviations existed that affected the validity of the study.

Study Director: Raymond G. York 14-MAR-01

Raymond G. York, Ph.D., DABT Date
Argus Research Laboratories, Inc.

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Protocol 1416-003: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or via Maternal Milk

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TITLE: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

ARGUS RESEARCH LABORATORIES, INC.,
PROTOCOL NUMBER: 1416-003

## I. SUMMARY

### A. Methods[a]

Fifteen or sixteen pregnant Crl:CD®(SD)IGS BR VAF/Plus® female rats were assigned to each of five exposure groups (Groups I through V) per study segments A, B and C, either at the time of Caesarean-sectioning or upon completion of appropriate sample collections for rats assigned to natural delivery. The rats were selected only from female rats that had litters of at least 12 live offspring at the time of Caesarean-sectioning (Part A) or at the time of the first tissue collection (Parts B and C). In Part B, on day 5 of lactation (DL 5), four pups per sex per litter were selected for continuation on study until DL 10. In Part C, on DL 5, four pups per sex per litter were selected for continuation on study until DL 22. The test substance was ammonium perchlorate, 99.8%, and the carrier was reverse osmosis membrane processed deionized water. A constant concentration (%) of the test substance equivalent to target doses, 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day, was offered to the rats in the drinking water, beginning 14 days before cohabitation and continuing through the day of sacrifice. F1 generation rats were not directly given the test substance but may have been exposed *in utero* during gestation and via maternal milk and maternal water during the postpartum period.

The P generation female rats were observed for viability at least twice each day of the study. The rats were examined daily during the exposure period for

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a. Detailed descriptions of all procedures used in the conduct of this study are provided in the appropriate sections of this report and in APPENDIX E (PROTOCOL AND AMENDMENTS).

clinical observations of effects of the test substance, abortions, premature deliveries and deaths. Body weights were recorded twice during acclimation and daily throughout the exposure period and at sacrifice. Feed and water consumption values were recorded daily during the exposure period. Feed and water consumption values were not tabulated after DL 14 for Part C. Maternal behavior was evaluated on DLs 1, 5, 8 and 10 (rats assigned to Part B) or DLs 1, 5, 8, 14 and 22 (rats assigned to Part C).

In Parts B and C, Day 1 of lactation (postpartum) was defined as the day of birth and was also the first day on which all pups in a litter were individually weighed. Vital status at birth was determined for pups that either appeared stillborn or that died before initial examination of the litter for viability. Litters were observed for dead pups at least twice daily. The pups in each litter were counted once each day. Clinical observations were recorded for the pups once daily. Pup body weights were recorded on DLs 1 (birth), 5, 8, and 10 (Part B) or DLs 1, 5, 8, 14 and 22 (Part C).

Blood samples for evaluation of thyroid hormones of P generation rats were collected immediately following sacrifice. Serum was aliquotted into three vials for TSH, $T_3$ and $T_4$ determination. Serum samples were shipped to Air Force Research Laboratory for analysis. The thyroids and parathyroids and a section of the trachea were removed intact and trimmed after fixation. Tissue samples were shipped to Experimental Pathology Laboratories for weighing and histological evaluation.

On DG 21, P generation female rats assigned to Part A were sacrificed and blood and tissue samples were collected as described above. A gross necropsy of the thoracic, abdominal and pelvic viscera was performed. The number of corpora lutea in each ovary was recorded. The uterus of each rat was excised and examined for pregnancy, number and distribution of implantations, live and dead fetuses and early and late resorptions. Placentae were examined for abnormalities (size, color or shape).

P generation rats assigned to Parts B and C that delivered a litter were sacrificed on either DL 10 (Part B) or DL 22 (Part C). Blood and tissue samples will be collected as described above. A gross necropsy of the thoracic, abdominal and pelvic viscera was performed. The number and distribution of implantation sites was recorded.

Each fetus of dams assigned to Part A was identified, weighed and examined for sex and gross external alterations. The thyroid and brain from one male and one female fetus per litter were selected for histopathological and morphometric evaluation. Thyroid, brain and blood samples were collected from all remaining fetuses. Blood samples for evaluation of thyroid hormones were collected from the fetuses not selected for histological evaluation. Samples were collected following immediately after sacrifice and pooled per litter. Serum was aliquotted

into three vials for TSH, $T_3$ and $T_4$ determination. Serum samples were shipped to Air Force Research Laboratory for analysis. Fetal thyroids were left on the trachea and the trachea with thyroid still attached were shipped for histological evaluation to Experimental Pathology Laboratories. Fetal brains were shipped for histopathology and morphometry to Consultants in Veterinary Pathology, Inc.

For Part B, pups not selected for continuation on study were sacrificed on DL 5 for blood and tissue sample collection. The remaining pups were sacrificed on DL 10 for blood and tissue sample collection. For Part C, pups not selected for continuation on study were sacrificed on DL 5 for blood sample collection. Pups selected for continuation on study were sacrificed on DL 22 postpartum for blood and tissue sample collection. Blood samples for evaluation of thyroid hormones was collected by immediately following sacrifice. Samples collected from all pups sacrificed on DL 5 and DL 10, including culled pups from both Parts B and C of the study, were pooled by litter. Samples collected from pups sacrificed on DL 22 were pooled by sex by litter. Serum was aliquotted into three vials of for TSH, $T_3$ and $T_4$ determination. Serum samples were shipped to Air Force Research Laboratory for analysis.

The thyroid and brain from one male pup per litter and from one female pup from per litter were selected for histopathological and morphometric evaluation. One set of male and female pups was selected for evaluation from those pups sacrificed on DL 5 (Part B); a second set was selected for evaluation from those pups sacrificed on DL 10 (Part B); and a third set was selected for evaluation from those pups sacrificed on DL 22 (Part C). Thyroid tissue samples were shipped for histopathological and morphometric evaluations to Experimental Pathology Laboratories, Inc. Brains from pups sacrificed on DL 10 and DL 22 were shipped to Consultants in Veterinary Pathology and Experimental Pathology Laboratories, respectively. Thyroid glands from sacrificed pups on DLs 5, 10 and 22 were weighed by Experimental Pathology Laboratories. Brain weights of pups sacrificed on DL 22 were recorded postfixation by Consultants in Veterinary Pathology, Inc.

## B. Results

### B.1. Consumed Dosages

The average actual consumed daily dosages for the female rats for the precohabitation, gestation and lactation exposure periods was as follows:

Consumed Dosages (mg/kg/day)

| Group Target Dosage (mg/kg/day) | Group I (Carrier) | Group II (0.01) | Group III (0.1) | Group IV (1.0) | Group V (30.0) |
|---|---|---|---|---|---|
| Precohabitation - Part A | 0.00 | 0.01 | 0.08 | 0.77 | 23.93 |
| Precohabitation - Part B | 0.00 | 0.01 | 0.09 | 0.78 | 23.89 |
| Precohabitation - Part C | 0.00 | 0.01 | 0.09 | 0.77 | 23.59 |
| Gestation - Part A | 0.00 | 0.01 | 0.10 | 0.98 | 28.73 |
| Gestation - Part B | 0.00 | 0.01 | 0.09 | 0.98 | 27.88 |
| Gestation - Part C | 0.00 | 0.01 | 0.09 | 0.94 | 28.41 |
| Lactation - Part B | 0.00 | 0.01 | 0.12 | 0.11 | 38.32 |
| Lactation - Part C | 0.00 | 0.01 | 0.12 | 1.26 | 38.32 |

## B.2. In-Life

There were no deaths, adverse clinical observations or necropsy findings during the premating, gestational and/or lactation periods that were considered treatment-related during Parts A, B and/or C.

Average body weights and body weight changes for female rats were comparable among the five exposure groups through the precohabitation, gestation and/or lactation periods during Parts A, B and/or C. Average maternal absolute and relative water and feed consumption values for female rats during the precohabitation, gestation and/or lactation periods were comparable among the five exposure groups during Parts A, B and/or C.

Caesarean-sectioning observations for Part A were based on 16 pregnant does on DG 21 in the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day dosage groups, respectively. Dosages as high as 30.0 mg/kg/day did not affect DG 21 Caesarean-sectioning or litter parameters.

There were 15 or 16 pregnant dams for Parts B and C that delivered and were selected in each of the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively. Natural delivery observations were unaffected by targeted dosages of the test substance as high as 30.0 mg/kg/day. All clinical and necropsy observations in the F1 generation pups were considered unrelated to the test substance.

## B.3. Thyroid Weights

The absolute and relative (relative to terminal body weight) thyroid weights in the 30.0 mg/kg/day dams sacrificed on DG 21, DL 10 and DL 22 were significantly increased over the carrier group values. The absolute thyroid weight of the DL 5

male pups in the 30.0 mg/kg/day exposure group was significantly increased over the carrier group value. There were no significant differences in absolute thyroid weights among the DL 5 female pups. The absolute thyroid weights of the DL 10 male pups in the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups were significantly increased over the carrier group value. The absolute thyroid weight of the DL 10 female pups in the 30.0 mg/kg/day exposure group was significantly increased over the carrier group value. The weight of the thyroid was significantly increased for the female pups on DL 22 in the 1.0 mg/kg/day exposure group and for the DL 22 male and female pups in the 30.0 mg/kg/day exposure group. The absolute thyroid weight was significantly reduced in the 1.0 mg/kg/day exposure group male pups on DL 22.

## B.4. Thyroid Histopathology

On DG 21, all 16 dams in the 30.0 mg/kg/day exposure group had an increased incidence of decreased colloid in the thyroids. An increased incidence of follicular cell hypertrophy was present in the 30.0 mg/kg/day exposure group dams. A dose-related increase in the incidence and severity of decreased colloid was present in male and female fetuses in the 1.0 and 30.0 mg/kg/day exposure groups.

At DL 5, an exposure-related increase in the incidence and severity of decreased colloid was present in male and female pups in the 1.0 and 30.0 mg/kg/day exposure groups (all male and female pups in the 30.0 mg/kg/day exposure group had decreased colloid).

An exposure-related increase in the incidence and severity of decreased colloid was present in the 1.0 and 30.0 mg/kg/day exposure group dams sacrificed on DL 10 (all dams in the 30.0 mg/kg/day exposure group had decreased colloid). An increased number of dams had follicular cell hyperplasia and follicular cell hypertrophy was present in all 30.0 mg/kg/day exposure group dams. Decreased colloid was present in all DL 10 male pups in the 30.0 mg/kg/day exposure group, and an exposure-related increase in the incidence and severity of decreased colloid was present in the DL 10 female pups in the 1.0 and 30.0 mg/kg/day exposure groups (all female pups in the 30.0 mg/kg/day exposure group had decreased colloid).

On DL 22, all dams in the 30.0 mg/kg/day exposure group had decreased colloid. An increased incidence of follicular cell hyperplasia was present in the 1.0 and 30.0 mg/kg/day dams and an increased incidence of follicular cell hypertrophy occurred in the 30.0 mg/kg/day dams. Male and female pups sacrificed on DL 22 in the 30.0 mg/kg/day exposure group had an increased incidence of decreased colloid.

The significantly increased thyroid weights in the 30.0 mg/kg/day exposure dams sacrificed on DLs 10 and 22 correlated to the follicular cell hypertrophy observed

in this group. Follicular cell hyperplasia may also have contributed to the increased thyroid weights in the 30.0 mg/kg/day exposure group dams.

## B.5 Thyroid Hormone Levels

Maternal TSH levels on DG 21 were significantly increased and $T_4$ levels were significantly decreased at the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure levels. The maternal $T_3$ level at the 30.0 mg/kg/day exposure level was significantly reduced, compared to the carrier group. Changes for all hormone levels occurred in an exposure-dependent manner. Fetal TSH levels were significantly increased at the 1.0 and 30.0 mg/kg/day exposures, $T_4$ levels were significantly decreased at the 30.0 mg/kg/day exposure, and $T_3$ levels were significantly decreased at the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure levels. Changes for all hormone levels occurred in an exposure-dependent manner.

Maternal TSH values on DL 10 were significantly increased at all treatment levels; increases occurred in an exposure-dependent manner. $T_4$ levels were decreased with increasing exposure; these changes were significant only at the 30.0 mg/kg/day exposure. Maternal $T_3$ levels were decreased with increasing exposure, however these changes were not statistically significant.

TSH levels in DL 5 culled pups in Part B increased in an exposure-dependent manner; these increases were not significantly different in treatment groups as compared to the carrier control group. $T_4$ and $T_3$ levels decreased with increasing dose; the levels of both hormones were significantly decreased in the 1.0 and 30.0 mg/kg/day groups.

TSH levels in DL 10 pups were significantly increased only in the 30.0 mg/kg/day exposure group. The $T_4$ values were not significantly decreased. $T_3$ values were significantly decreased at the 1.0 and 30.0 mg/kg/day exposure levels. Again, all hormone changes occurred in an exposure-dependent manner. Hormonal levels were similar between the DL5 (Part B) and DL10 pups.

Maternal TSH values on DL 22 were significantly increased at the 0.1, 1.0 and 30.0 mg/kg/day exposure levels; increases occurred in an exposure-dependent manner. $T_4$ levels were decreased with increasing exposure; these changes were significant only at the 30.0 mg/kg/day exposure. Maternal $T_3$ levels were decreased with increasing exposure, however these changes were not statistically significant.

TSH levels in DL 5 culled pups in Part C increased in an exposure-dependent manner; reaching statistical significance at the 1.0 and 30.0 mg/kg/day exposure levels. $T_4$ serum levels decreased with increasing dose; the levels were significantly decreased in all treatment groups. Culled pup $T_3$ levels were decreased with increasing exposure; however, these changes were not statistically significant.

TSH and $T_4$ serum levels were significantly different at all exposure levels in the DL 22 male pups. TSH was significantly increased in the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups and $T_4$ levels were significantly decreased in the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups. $T_3$ levels were also significantly decreased in the 1.0 and 30.0 mg/kg/day exposure groups. TSH levels were increased in the DL 22 female pups at all exposure levels, reaching significance in the 0.1, 1.0 and 30.0 mg/kg/day exposure groups. $T_4$ levels were decreased with increased exposure but did not reach statistical significance. $T_3$ levels were significantly decreased only in the 30.0 mg/kg/day exposure group.

## B.6. Brain Neuropathology/Morphomerty

Detailed microscopic examination of multiple coronal sections from DLs 10 and 22 pups in each of the 0.0 and 30.0 mg/kg/day exposure groups failed to indicate any evidence of treatment-related neuropathologic alterations or of microscopic developmental anomalies.

The mean values for the linear dimensions of a number of brain regions for both DL 10 male and female rat pups were found to be either significantly greater or lesser in certain treated groups. The test substance appeared to have a trophic effect, with a number of brain regions in certain groups being of significantly greater dimension for the male pups. Even so, there was no evidence of any obvious treatment-related effects on male rat brain weights. Significant differences were found for some brain structures in all male treatment groups except in the 0.01 mg/kg/day exposure group. The most consistent treatment-related effect in the male pups was on the thickness of the corpus callosum, with both the right and left-sided measures of the thickness of this white matter tract being significantly greater for the male pups in the 0.1 and 1.0 exposure groups.

Numerous brain regions were slightly attenuated in comparison to DL 10 female pup control group values. There was no evidence of dose-related enhancement for these differences. For the CA1 region of the hippocampus, significant differences from control group values were noted for both the female pups in the 0.1 and 1.0 mg/kg/day exposure groups.

There was a trend for increased linear dimensions for the DL 22 male pups, in a number of brain regions, especially for the posterior level of the corpus callosum and, to a lesser extent, for certain hippocampal and cortical thickness measures. The pattern was reversed for the female pups. The female pup data were more variable between groups, with some dimensions being of lesser value and some of greater value than for the female pup control group. However, for both the male and female pup groups, the means of the full thickness of the cerebellum were found to be thicker for all of the test substance-exposed groups. These increases were statistically significant for the male rats in the 0.01, 0.1 and

1.0 mg/kg/day test substance-treated groups, as well as for female rats in the 0.01 and 1.0 mg/kg/day exposure groups.

The pattern of inter-group differences seen in the morphometric parameters for the DL 22 pups were similar to those encountered with the DL 10 pups. At both age points, the brains of male pups tended to have a number of neuroanatomic regions that were thicker than similar regions in control group brains, while the reverse trend was present for the female pups. No effect was seen on the thickness/height of the cerebellum at day 10, however.

for George Beaulave 14 MAR 01

Alan M. Hoberman, Ph.D., DABT Date
Director of Research

Raymond G. York 14-MAR-01

Raymond G. York, Ph.D., DABT Date
Associate Director of Research and
Study Director

# II. DESCRIPTION OF TEST PROCEDURES

The final report for this study was issued as two stand-alone GLP compliant reports. This report describes the results of Parts A, B and C of the study.

## A. Conduct of Study

### A.1. Sponsor

Perchlorate Study Group, Highway 50 & Aerojet Road, Building 20019/ Department 0330, Rancho Cordova, California 95670

### A.2. Testing Facility

Argus Research Laboratories, Inc., 905 Sheehy Drive, Building A, Horsham, Pennsylvania 19044-1297

### A.3. Study Number

1416-003

### A.4. Purposes of the Study

The purposes of this study were: 1) to determine the teratogenicity of perchlorate in a second species (rat); 2) to measure thyroid stimulating hormone (TSH), thyroxine ($T_4$) and triiodothyronine ($T_3$) changes in developing rats (fetal and neonate) and in adult female rats during pregnancy and lactation; 3) to measure neurohistological and thyroid effects at the same time points; and 4) to correlate these effects with hormone concentration changes at different stages in development of the rat.

Data from this study will be used in developing the final Reference Dose (RfD) for perchlorate, needed by the U.S. Environmental Protection Agency for risk assessment and to establish cleanup levels of perchlorate-contaminated sites.

Physiologically based pharmacokinetic (PBPK) models predict tissue dosimetry in the target species and are used to extrapolate animal data to the human for development of exposure standards. This study was designed to provide data for the development of a physiologically based pharmacodynamic (PBPD) model to predict TSH, $T_4$ and $T_3$ levels in the thyroid gland of fetal, neonatal, nonpregnant, pregnant and lactating rats. The resulting PBPK and PBPD models, combined with a PBPK model for perchlorate iodine inhibition kinetics generated from data in a parallel study, were designed to provide scientific basis for the health risk posed by low level human exposure, including potential sensitive sub-populations, to perchlorate in drinking water.

In order to facilitate study management and expedite sample shipment, the study was divided into four segments but only three segments are discussed in this report.

Part A, during which blood and thyroid samples were collected from maternal rats and blood, thyroid and brain samples were collected from fetuses at Caesarean-sectioning on day 21 of presumed gestation;

Part B, during which blood and thyroid samples were collected from maternal rats on day 10 postpartum and blood, thyroid and brain samples were collected from pups on days 5 and 10 postpartum;

Part C, during which blood and thyroid samples were collected from maternal rats on day 22 postpartum, and blood, thyroid and brain samples were collected from pups on day 5 postpartum (culled pups) and on day 22 postpartum.

## A.5. Study Design

The requirements of the U.S. Environmental Protection Agency[1,2] were used as the basis for study design.

## A.6. Regulatory Compliance

The study was conducted in compliance with Good Laboratory Practice (GLP) regulations of the U.S. Environmental Protection Agency (EPA)[3]. There were no deviations from the GLP regulations that affected the quality or integrity of the study. Quality Assurance Unit findings derived from the inspections during the conduct of this study are documented and have been provided to the Study Director and the Testing Facility Management.

## A.7. Ownership of the Study

The Sponsor owns the study. All raw data, analyses, reports and preserved tissues are the property of the Sponsor.

## A.8. Study Monitor

Michael F. Girard (Perchlorate Study Group Representative)

## A.9. Scientific Advisor

Michael L. Dourson, Ph.D., DABT [Toxicology Excellence for Risk Assessment (TERA), Cincinnati, Ohio]

**A.10. Study Director**

Raymond G. York, Ph.D., DABT (Associate Director of Research)

**A.11. Technical Performance**

John F. Barnett, B.S. (Director of Laboratory Operations)
Christopher Carboni (Team Leader - General Laboratory)
Sharon Adamski, B.S. (Laboratory Technician)
Theodore J. Detwiler, B.S. (Laboratory Technician)
Brian K. Kelsch (Necropsy Laboratory Technician)
Michael D. Brennan, B.S. (Formulation Laboratory Technician)

**A.12. Report Preparation**

Raymond G. York, Ph.D., DABT
Jo Ann Frazee, M.S. (Study Coordinator)
Elizabeth M. Wiley, B.S. (Data Management Specialist)
Georgia Y. Burnett, A.A.S. (Report Administrator)

**A.13. Report Review**

Alan M. Hoberman, Ph.D., DABT (Director of Research)
Mildred S. Christian, Ph.D., Fellow, ATS (Executive Director of Research)

**A.14. Date Protocol Signed**

27 December 1999

**A.15. Dates of Technical Performance**

**A.15.a. Part A**

| | |
|---|---|
| Rat Arrival | 21 DEC 99 |
| Exposure Period (Two weeks prior to cohabitation and continuing through the day of sacrifice[a]) | 28 DEC 99 - 04 FEB 00 |
| Cohabitation Period | 10 JAN 00 PM - 15 JAN 00 AM |
| Caesarean-Sectioning Period (DG[b] 21) | 01 FEB 00 - 04 FEB 00 |

a. See APPENDIX F (DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILITY), item 1.
b. DG is used as an abbreviation for day of (presumed) gestation.

**A.15.b. Part B**

| | |
|---|---|
| Rat Arrival | 21 DEC 99 |
| Exposure Period (Two weeks prior to cohabitation and continuing through the day of sacrifice[a]) | 01 JAN 00 - 18 FEB 00 |
| Cohabitation Period | 14 JAN 00 PM - 24 JAN 00 AM |
| Delivery Period | 05 JAN 00 - 13 JAN 00 |
| DG 25 Sacrifice | 09 FEB 00 - 12 FEB 00 |
| Scheduled Sacrifice (DL[b] 5) | 09 FEB 00 - 17 FEB 00 |
| Scheduled Sacrifice (DL 10) | 14 FEB 00 - 22 FEB 00 |

**A.15.c. Part C**

| | |
|---|---|
| Rat Arrival | 21 DEC 99 |
| Exposure Period (Two weeks prior to cohabitation and continuing through the day of sacrifice[a]) | 28 DEC 99 - 26 FEB 00 |
| Cohabitation Period | 10 JAN 00 PM - 15 JAN 00 AM |
| Delivery Period | 01 FEB 00 - 05 FEB 00 |
| DG 25 Sacrifice | 06 FEB 00 - 08 FEB 00 |
| Scheduled Sacrifice (DL 22) | 22 FEB 00 - 26 FEB 00 |

**A.16. Records Maintained**

The original report, raw data and reserve samples of the bulk test substance and carrier are retained in the archives of Argus Research Laboratories, Inc. Any preserved tissues are retained in the archives of the Testing Facility for one year after the mailing of the draft final report, after which time the Sponsor will decide their final disposition. All unused bulk test substance and prepared formulations were discarded at the Testing Facility.

## B. Test Substance Information

**B.1. Description**

Ammonium Perchlorate, 99.8% (CAS Number 7790-98-9) - a white, crystalline solid

**B.2. Lot Number**

03907LF

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a. See APPENDIX F, item 1.
b. DL is used as an abbreviation for day of lactation or day postpartum.

### B.3. Date Received and Storage Conditions

The test substance was received on 12 January 1998, from Aldrich Chemical Company, Milwaukee, Wisconsin, and stored at room temperature.

### B.4. Special Handling Instructions

Protective clothing, gloves, half-face respirator, safety goggles or safety glasses and a face-shield were worn when handling the bulk test substance and prepared solutions. The formulations were prepared in a fume hood.

### B.5. Analysis of Purity

The Certificate of Analysis for the test substance is available in APPENDIX G.

## C. Carrier Information

### C.1. Description

Reverse osmosis membrane processed deionized water (R.O. deionized water)

### C.2. Storage Conditions

The R.O. deionized water is available from a continuous source at the Testing Facility and is maintained at room temperature.

### C.3. Special Handling Instructions

Standard safety precautions (use of protective clothing, gloves, dust-mist respirator, safety goggles or safety glasses and a face-shield) were taken when handling the carrier.

### C.4. Analysis of Purity

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the carrier that would have interfered with the results of this study. Results of the R.O. deionized water analyses are available in APPENDIX H.

## D. Test Substance Preparation

Formulations of ammonium perchlorate were prepared at least once weekly at the Testing Facility. Prepared stock formulations (10 mg/mL) were stored refrigerated. Dosage solutions were stored at room temperature.

### D.1. Sample Information

| Sample Type | Size | Date Retained | Storage/Shipping Conditions | Shipped To | Date Shipped |
|---|---|---|---|---|---|
| Concentration[a] (all levels) | 2 mL | 27 DEC 99<br>06 MAR 00 | Refrigerated | Air Force Research Laboratory[b] | 27 DEC 99<br>06 MAR 00 |
| Bulk Test Substance Reserve | 5 g<br>1 g | 27 DEC 99<br>15 MAR 00 | Room temperature | Testing Facility Archives | 17 APR 00<br>17 APR 00 |
| Carrier Reserve | 5 mL | 27 DEC 99 | Room temperature | Testing Facility Archives | 17 APR 00 |

a. Triplicate samples were taken from each formulation (including stock solution and carrier) on first and last days prepared. Two samples from each triplicate set were shipped for analysis; the remaining samples were retained at the Testing Facility as backup samples.
b. Operational Toxicology Branch, Air Force Research Laboratory (AFRL), Wright Patterson Air Force Base, Ohio.

### D.2. Analytical Results

Documentation of the stability of the prepared solutions is available in APPENDIX I. Stability has been established for up to 109 days. The results of the concentration analyses (tabled below) indicated no contamination of the vehicle and that the concentrations of all samples were within ±5% of target Results of the concentration analysis are available in APPENDIX I.

| First Preparation | | | | | |
|---|---|---|---|---|---|
| Target Concentration (µg/mL) | 0 | 0.0658 | 0.658 | 6.58 | 197.27 |
| Actual Concentration (µg/mL) | 0 | 0.0661 | 0.657 | 6.62 | 197.64 |
| Last Preparation | | | | | |
| Target Concentration (µg/mL) | 0 | 0.0665 | 0.623 | 6.78 | 218.50 |
| Actual Concentration (µg/mL) | 0 | 0.0671 | 0.625 | 6.93 | 218.45 |

## E. Test System

### E.1. Species

Rat

## E.2. Strain

Crl:CD®(SD)IGS BR VAF/Plus®

## E.3. Supplier (Source)

Charles River Laboratories, Inc., Raleigh, North Carolina

## E.4. Sex

Female (Note: Male rats were used only for the purposes of breeding and are not considered part of the Test System. Breeder male rats were exposed to the test substance during the cohabitation period, and were sacrificed upon completion of the cohabitation period.)

## E.5. Rationale for Test System

The Crl:CD®(SD)IGS BR VAF/Plus® rat was selected as the Test System because: 1) this strain of rat has been demonstrated to be sensitive to reproductive and developmental toxins and has been widely used throughout industry for reproductive and developmental toxicity evaluations; and 2) historical data and experience exist at the Testing Facility[4-6].

## E.6. Test System Data

| | |
|---|---|
| Number of Rats | 360 |
| Approximate Date of Birth | 11 OCT 99 |
| Approximate Age at Arrival | 72 days |

| | Part A | Part B | Part C |
|---|---|---|---|
| Weight (g) on Day After Arrival | 190 - 247 | 190 - 247 | 187 - 249 |
| Weight (g) at Study Assignment | 208 - 263 | 212 - 269 | 204 - 265 |

## E.7. Method of Randomization

Upon arrival, male and female rats were assigned to individual housing on the basis of computer-generated random units. After acclimation, rats were selected for study on the basis of physical appearance and body weight. The rats were assigned to groups based on computer-generated (weight-ordered) randomization procedures.

Sixteen female rats per group per study segments A, B and C were selected either at the time of Caesarean-sectioning or upon completion of appropriate

sample collections for rats assigned to natural delivery[a]. The rats were selected only from female rats that had litters of at least 12 live offspring at the time of Caesarean-sectioning (Part A) or at the time of the first tissue collection (Parts B and C). After evaluations were completed for the appropriate number of rats per group per segment, the remaining rats in that group were sacrificed[b]. Gestation and/or lactation data for rats not selected for Caesarean-sectioning or evaluation after delivery were not tabulated and are retained in the raw data records.

In Part B, on DL 5, four pups per sex per litter were randomly selected for continuation on study until DL 10. The timing of this process was staggered across exposure groups. The remaining pups were sacrificed on DL 5.

In Part C, on DL 5, four pups per sex per litter were randomly selected for continuation on study until DL 22. The timing of this process was staggered across exposure groups. The remaining pups were sacrificed on DL 5.

### E.8. System of Identification

Male rats were given unique permanent identification numbers upon assignment to the Testing Facility's breeder male rat population. Female rats were assigned temporary numbers at receipt and given unique permanent identification numbers when assigned to the study. Each rat was individually identified with a Monel® self-piercing ear tag (Gey Band and Tag Co., Inc., No. MSPT 20101) inscribed with the rat's designated unique permanent number. Cage tags were marked with the study number, permanent rat number, sex, test substance identification and dosage level.

Pups were not individually identified during the lactation period; all parameters were evaluated in terms of litter.

## F. Husbandry

### F.1. Research Facility Registration

USDA Registration No. 23-R-099 under the Animal Welfare Act, 7 U.S.C. 2131 *et seq.*

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a. See APPENDIX F, item 2 and 3.
b. See APPENDIX F, item 4.

## F.2. Study Rooms

The study rooms were maintained under conditions of positive airflow relative to a hallway and independently supplied with a minimum of ten changes per hour of 100% fresh air that had been passed through 99.97% HEPA filters. Room temperature and humidity were monitored constantly throughout the study. Room temperature was targeted at 64°F to 79°F (18°C to 26°C); relative humidity was targeted at 30% to 70%, see APPENDIX H (ENVIRONMENTAL AND HUSBANDRY REPORTS).

## F.3. Housing

P generation rats were individually housed in stainless steel, wire-bottomed cages except during the cohabitation and postpartum periods. During cohabitation, each pair of male and female rats was housed in the male rat's cage. Beginning no later than DG 20, P generation female rats assigned to natural delivery (Parts B and C) were individually housed in nesting boxes. Each dam and delivered litter was housed in a common nesting box during the postpartum period. All cage sizes and housing conditions were in compliance with the *Guide for the Care and Use of Laboratory Animals*[7].

## F.4. Lighting

An automatically-controlled fluorescent light cycle was maintained at 12-hours light:12-hours dark, with each dark period beginning at 1900 hours EST.

## F.5. Sanitization

Cage pan liners were changed approximately three times each week. Cages were changed approximately every other week. The bedding was changed as often as necessary to keep the rats dry and clean.

## F.6. Feed

Rats were given *ad libitum* access to Certified Rodent Diet® #5002 (PMI Nutrition International, St. Louis, Missouri) in individual feeders.

## F.7. Feed Analysis

Analyses were routinely performed by the feed supplier. No contaminants at levels exceeding the maximum concentration limits for certified feed or deviations from expected nutritional requirements were detected by these analyses. Copies of the results of the feed analyses are available in the raw data and APPENDIX H.

Neither the Study Director nor the Sponsor was aware of any potential contaminants likely to have been present in the feed that would have interfered with the results of this study.

## F.8. Water

All water was from a local source and was processed by passage through a reverse osmosis membrane (R.O. water) before use. Chlorine was not added to the processed water.

During the acclimation period, rats were given R.O. deionized water available *ad libitum* from individual amber bottles attached to the cages. During the exposure period, rats were given either R.O. deionized water only (carrier control group) or test drinking water prepared using R.O. deionized water and the test substance. These were available *ad libitum* from individual amber bottles attached to the cages.

## F.9. Water Analysis

The processed water is analyzed twice annually for possible chemical contamination (Lancaster Laboratories, Lancaster, Pennsylvania) and monthly for possible bacterial contamination (Analytical Laboratories, Inc., Chalfont, Pennsylvania). Copies of the results of the water analyses are available in the raw data and in APPENDIX H.

Neither the Study Director nor the Sponsor was aware of any potential contaminants likely to have been present in the water that would have interfered with the results of this study.

## F.10. Bedding

Bed-o'cobs® bedding (The Andersons Industrial Products Group, Maumee, Ohio) was used as the nesting material.

## F.11. Bedding Analysis

Analyses for possible contamination are conducted semi-annually. Copies of the results of the bedding analyses are available in the raw data and in APPENDIX H.

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the bedding that would have interfered with the results of the study.

## G. Methods

### G.1. Dosage Administration

| Dosage Group | Target Dosage (mg/kg/day) | Concentration (ug/mL) | Number of Female Rats Per Part | Assigned Numbers | | |
|---|---|---|---|---|---|---|
| | | | | Part A | Part B | Part C |
| I | 0 (Carrier) | 0 | 23 | 16501 - 16523 | 16616 - 16638 | 16731 - 16753 |
| II | 0.01 | 0.08 | 23 | 16524 - 16546 | 16639 - 16661 | 16754 - 16776 |
| III | 0.1 | 0.8 | 23 | 16547 - 16569 | 16662 - 16684 | 16777 - 16799 |
| IV | 1.0 | 7.6 | 23 | 16570 - 16592 | 16685 - 16707 | 16800 - 16822 |
| V | 30.0 | 227.4 | 23 | 16593 - 16615 | 16708 - 16730 | 16823 - 16845 |

Initial test substance concentrations were calculated to deliver the target dosage based on average water consumption of 33 mL per rat per day (132 mL/kg/day) for a 250 g rat. Concentrations were adjusted based on actual water consumption and body weights recorded the previous week[a]. The test substance was considered 100% pure for the purpose of dosage calculations.

a. See APPENDIX F, item 5.

The actual concentrations offered to the rats were as follows:

| Preparation Date | Dosage Group Concentration (µg/mL) | | | |
|---|---|---|---|---|
| | Group II | Group III | Group IV | Group V |
| 27 DEC 99 | 0.0658 | 0.658 | 6.58 | 197.27 |
| 05 JAN 00 | 0.0658 | 0.658 | 6.58 | 197.27 |
| 12 JAN 00 | 0.0640 | 0.633 | 6.38 | 192.00 |
| 19 JAN 00 | 0.0618 | 0.611 | 6.32 | 190.71 |
| 26 JAN 00 | 0.0687 | 0.635 | 6.99 | 199.78 |
| 02 FEB 00 | 0.0773 | 0.751 | 8.06 | 233.97 |
| 09 FEB 00 | 0.0531 | 0.577 | 5.23 | 164.31 |
| 13 FEB 00 | 0.0531 | 0.577 | 5.23 | 164.31 |
| 16 FEB 00 | 0.0440 | 0.483 | 4.92 | 140.66 |
| 23 FEB 00 | 0.0367 | 0.376 | 3.98 | 126.32 |

## G.2. Rationale for Dosage Selection

Target dosage levels were selected by the Sponsor based on previous studies conducted with the test substance. The 10 mg/kg/day dosage resulted in thyroid effects in pups on day 5 postpartum (DP 5) in a neurobehavioral developmental study (Argus Research Laboratories, Inc., Protocol 1613-002), and was clearly an effect level in a 90-day drinking water study in rats[8].

Because the dosage in the neurobehavioral developmental study did not begin until after mating (confirmation of pregnancy), exposure started two weeks prior to the start of cohabitation to ensure a hypothyroid state, and continued until sacrifice.

## G.3. Route of Administration

Oral (drinking water)

## G.4. Rationale for Route of Administration

The oral (drinking water) route was selected because it is the most likely route of human exposure.

## G.5. Frequency of Administration

A constant concentration (%) of the test substance equivalent to target doses was offered to the rats in the drinking water. Concentrations were adjusted weekly as necessary, based on actual body weight and water consumption

values recorded the previous week[a]. P generation rats were given continual access to the test substance in the drinking water beginning 14 days before cohabitation and continuing through the day of sacrifice. During the cohabitation period, male breeder rats had access to the water bottles of the female rats.

F1 generation rats were not directly given the test substance but may have been exposed *in utero* during gestation and via maternal milk and maternal water during the postpartum period.

## G.6. Method of Study Performance

### G.6.a. P Generation Dams

The female rats were observed for viability at least twice each day of the study and for general appearance twice during acclimation. The rats were examined daily during the exposure period for clinical observations of effects of the test substance, abortions, premature deliveries and deaths. Body weights were recorded twice during acclimation and daily throughout the exposure period and at sacrifice. Feed and water consumption values were recorded daily during the exposure period[b]. Feed and water consumption values were not tabulated for female rats without confirmed mating dates during the cohabitation period. Feed and water consumption values were not tabulated after DL 14 for Part C, when it was expected that pups would begin to consume the maternal feed and water.

Following two weeks of exposure to the test substance or carrier, the female rats were cohabited with breeder male rats, one male rat per female rat. The cohabitation period consisted of a maximum of five days for Parts A and C and a maximum of ten days for Part B of the study. Female rats with spermatozoa observed in a smear of the vaginal contents and/or a copulatory plus observed *in situ* were considered to be at DG 0 and assigned to individual housing.

Maternal behavior was evaluated on DLs 1, 5, 8 and 10 (rats assigned to Part B) or DLs 1, 5, 8, 14 and 22 (rats assigned to Part C). Variations from expected maternal behavior were recorded, if and when present, on all other days of the postpartum period.

### G.6.b. F1 Generation Litters - Parts B and C

Day 1 of lactation (postpartum) was defined as the day of birth and was also the first day on which all pups in a litter were individually weighed (pup body weights were recorded after all pups in a litter were delivered and groomed by the dam). Vital status at birth was determined for pups that either appeared stillborn or that died before initial examination of the litter for viability. The lungs were removed

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a. See APPENDIX F, item 5.
b. See APPENDIX F, items 6 and 7.

and immersed in water. Pups with lungs that sank were considered stillborn; pups with lungs that floated were considered liveborn and to have died shortly after birth.

Litters were observed for dead pups at least twice daily. The pups in each litter were counted once each day. Clinical observations were recorded for the pups once daily. Pup body weights were recorded on DLs 1 (birth), 5, 8, and 10 (Part B) or DLs 1, 5, 8, 14 and 22 (Part C) and at sacrifice.

## G.7. Gross Necropsy

Prior to sacrifice, every effort was made to avoid inducing stress that could affect scheduled hormone evaluations. Because of the circadian rhythm of thyroid hormones, dams and pups were sacrificed in the morning hours[a]. Sacrifice was staggered across dosage groups.

P generation dams were sacrificed by carbon dioxide asphyxiation. For Part A of the study, one male or one female fetus per litter was sacrificed by an intraperitoneal injection of Beuthanasia®-D Special (manufactured by Schering-Plough Animal Health) for thyroid collection and the remaining fetuses in each litter were sacrificed by decapitation for blood collection. Pups in Parts B and C were sacrificed by carbon dioxide asphyxiation followed by cardiac puncture.

Gross lesions were retained in neutral buffered 10% formalin for possible future evaluation. Unless specifically cited below, all other tissues were discarded.

Histopathologic evaluation of thyroid glands (described below) was conducted in stages in the following order: DL 5 pups, DL 10 dams and pups, DL 22 dams and pups and DG 21 dams and fetuses. Histopathological evaluation of brains (described below) was conducted in stages in the following order: DLs 10 and 22 pups, DL 5 pups and DG 21 fetuses.

The following P generation dams and their respective fetus or pups were selected for maternal and pup blood, thyroid and parathyroid and brain sample collection.

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a. See APPENDIX F, item 8.

| Dosage Group | Target Dosage (mg/kg/day) | Assigned Numbers | | |
|---|---|---|---|---|
| | | Part A | Part B | Part C |
| I | 0 (Carrier) | 16501 - 16506, 16508 - 16510, 16513 - 16516, 16519, 16521, 16522 | 16616 - 16621, 16623, 16625, 16626, 16629 - 16631, 16634 - 16637 | 16731, 16732, 16734 - 16738, 16740 - 16742, 16745 - 16747, 16749, 16750, 16753 |
| II | 0.01 | 16524 - 16526, 16528, 16529, 16531, 16532, 16535, 16536, 16339 - 16542, 16544 - 16546 | 16640, 16641, 16643 - 16647, 16649 - 16651, 16653 - 16657, 16659 | 16755, 16758, 16760 - 16765, 16767 - 16771, 16773, 16774, 16776 |
| III | 0.1 | 16547, 16548, 16550, 16552 - 16555, 16557, 16559 -16563, 16565 - 16567 | 16662, 16664 - 16670, 16673, 16675, 16676, 16678 - 16681, 16683 | 16781 - 16784, 16786, 16787, 16791 - 16799 |
| IV | 1.0 | 16570, 16571, 16574 - 16584, 16587, 16589, 16592 | 16685 - 16690, 16692, 16693, 16695 - 16699, 16701, 16706, 16707 | 16800 - 16803, 16805 - 16808, 16810, 16811, 16814, 16815, 16817, 16818, 16820, 16822 |
| V | 30.0 | 16593, 16594, 16596 - 16598, 16600 - 16602, 16605, 16606, 16608 - 16611, 16613, 16614 | 16708, 16709, 16711 - 16713, 16715 - 16719, 16722 - 16725, 16728, 16730 | 16823, 16825 - 16828, 16830, 16831, 16833, 16834, 16836, 16837, 16839, 16840, 16842 - 16844 |

### G.7.a. P Generation Rats

#### G.7.a.1. Maternal Blood and Tissue Collection - Parts A, B and C

Blood samples for evaluation of thyroid hormones were collected from the inferior vena cava immediately following sacrifice. The time of sample collection was documented in the raw data. Blood was collected into serum separator tubes to yield approximately 1125 µL of serum, and aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination, respectively[a]. Serum samples were immediately frozen on dry ice and maintained frozen (-70°C) until shipment to Air Force Research Laboratory (AFRL), Wright Patterson Air Force Base, Ohio, for analysis.

The thyroids and parathyroids and a section of the trachea were removed intact and fixed for at least 48 hours in neutral buffered 10% formalin. Tissue samples were shipped for histological evaluation to Experimental Pathology Laboratories, Inc (EPL), Sterling, Virginia. Each thyroid gland was carefully removed from the trachea. Thyroid glands were weighed at EPL from dams sacrificed on DG 21, DL 10 and DL 22. The same personnel weighed the thyroid glands for both the pups and adults in that same dosage group.

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a. See APPENDIX F, item 9.

### G.7.a.2. Scheduled Sacrifice - Part A

On DL 21, rats were sacrificed and blood and tissue samples were collected as described above. A gross necropsy of the thoracic, abdominal and pelvic viscera was performed. To confirm the pregnancy status, uteri from rats that appeared nonpregnant were examined while being pressed between glass plates. Representative photographs of maternal lesions are available in the raw data.

The number of corpora lutea in each ovary was recorded. The uterus of each rat was excised and examined for pregnancy, number and distribution of implantations, live and dead fetuses and early and late resorptions. An early resorption was defined as one in which organogenesis was not grossly evident. A late resorption was defined as one in which the occurrence of organogenesis was grossly evident. A live fetus was defined as a term fetus that responded to mechanical stimuli. Nonresponding term fetuses were considered to be dead (there were no dead fetuses). Dead fetuses and late resorptions were differentiated by the degree of autolysis present; marked to extreme autolysis indicated that the fetus was a late resorption. Placentae were examined for abnormalities (size, color or shape).

### G.7.a.3. Scheduled Sacrifice - Parts B and C

Rats that delivered a litter were sacrificed on either DL 10 (Part B) or DL 22 (Part C). Blood and tissue samples will be collected as described above. A gross necropsy of the thoracic, abdominal and pelvic viscera was performed. The number and distribution of implantation sites was recorded.

### G.7.a.4. Rats Not Selected for Continuation on Study

P generation rats not among the sixteen or twenty per group per study segment selected upon Caesarean-sectioning or completion of sample collection were sacrificed and evaluated until it was determined they were not to be selected or sacrificed and discarded without further evaluation[a].

## G.7.b. F1 Generation Fetuses and Pups

### G.7.b.1. Fetuses - Part A

Each fetus was removed from the uterus, placed in an individual container and identified with a tag noting the study number, litter number, uterine distribution and fixative. Each fetus was subsequently weighed and examined for sex and gross external alterations. Late resorptions and dead fetuses were examined for sex to the extent possible but such observations were not included in either data

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a. See APPENDIX F, item 4.

summarization or statistical analyses. Only body weights of live fetuses were used to determine litter fetal body weight averages.

The thyroid and brain from one male and one female fetus per litter were selected for histopathological and morphometric evaluation. Thyroid, brain and blood samples were collected from all remaining fetuses. The timing of these collection processes was staggered across exposure groups.

Blood samples for evaluation of thyroid hormones were collected from the fetuses not selected for histological evaluation. Samples were collected following decapitation immediately after sacrifice and pooled per litter. Blood was collected into serum separator tubes to yield approximately 1125 µL of serum, and aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination, respectively. Serum samples were immediately frozen on dry ice and maintained frozen (-70°C) until shipment to Air Force Research Laboratory (AFRL) for analysis.

Fetal thyroids were left on the trachea and the trachea with thyroid still attached was laid flat in a cassette. Fetal thyroids were shipped for histological evaluation to Experimental Pathology Laboratories. Fetal brains were shipped for histopathology and morphometry to Consultants in Veterinary Pathology, Monroeville, Pennsylvania.

All fetuses were fixed for at least forty-eight hours in Bouin's solution and retained in neutral buffered 10% formalin.

**G.7.b.2. <u>Pups - Parts B and C</u>**

For Part B, pups not selected for continuation on study were sacrificed on DL 5 for blood and tissue sample collection as described below. The remaining pups were sacrificed on DL 10 for blood and tissue sample collection as described below. Pups were retained in neutral buffered 10% formalin.

For Part C, pups not selected for continuation on study were sacrificed on DL 5 for blood sample collection as described below, and retained in neutral buffered 10% formalin without further analysis. Pups selected for continuation on study were sacrificed on DL 22 postpartum for blood and tissue sample collection as described below. Pups were retained in neutral buffered 10% formalin.

Blood samples for evaluation of thyroid hormones were collected by cardiac puncture of the inferior vena cava immediately following sacrifice. The time of sample collection was documented in the raw data. Samples collected from all pups sacrificed on DL 5 and DL 10, including culled pups from both Parts B and C of the study, were pooled by litter. Samples collected from pups sacrificed on DL 22 were pooled by sex by litter. Blood was collected into serum separator tubes to yield approximately 1125 µL of serum, and aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination,

respectively. If necessary, sample collection was prioritized by hormone as follows: TSH, followed by $T_3$, followed by $T_4$[a]. Serum samples were immediately frozen on dry ice and maintained frozen (-70°C) until shipment to Air Force Research Laboratory (AFRL) for analysis.

The thyroid and brain from one male pup per litter and one female pup per litter were selected for histopathological and morphometric evaluation[b]. One set of male and female pups was selected for evaluation from those pups sacrificed on DL 5 (Part B); a second set was selected for evaluation from those pups sacrificed on DL 10 (Part B); and a third set was selected for evaluation from those pups sacrificed on DL 22 (Part C). Tissues for neurohistological evaluations were shipped (ambient conditions) to Consultants in Veterinary Pathology (DL 10) and EPL (DL 22). Brain weights for DL 10 pups were recorded postfixation by Consultants in Veterinary Pathology personnel. Brain weights for DL 22 pups were recorded postfixation by EPL personnel. Thyroid tissue samples were collected as described for P generation dams. Thyroid tissue samples were shipped (ambient conditions) for histopathological evaluations to Experimental Pathology Laboratories, Inc. Thyroid glands from pups selected on DLs 5, 10 and 22 were weighed at EPL.

## G.8. Data Acquisition and Statistical Analysis

Data generated during the course of this study were recorded either by hand or using the *Primedica Argus Automated Data Collection and Management System* and the *Vivarium Temperature and Relative Humidity Monitoring System*. All data were tabulated, summarized and statistically analyzed using the *Primedica Argus Automated Data Collection and Management System*, the *Vivarium Temperature and Relative Humidity Monitoring System, Microsoft Excel* [part of Microsoft Office 97 (version SR-2)] and/or *The SAS System* (version 6.12).

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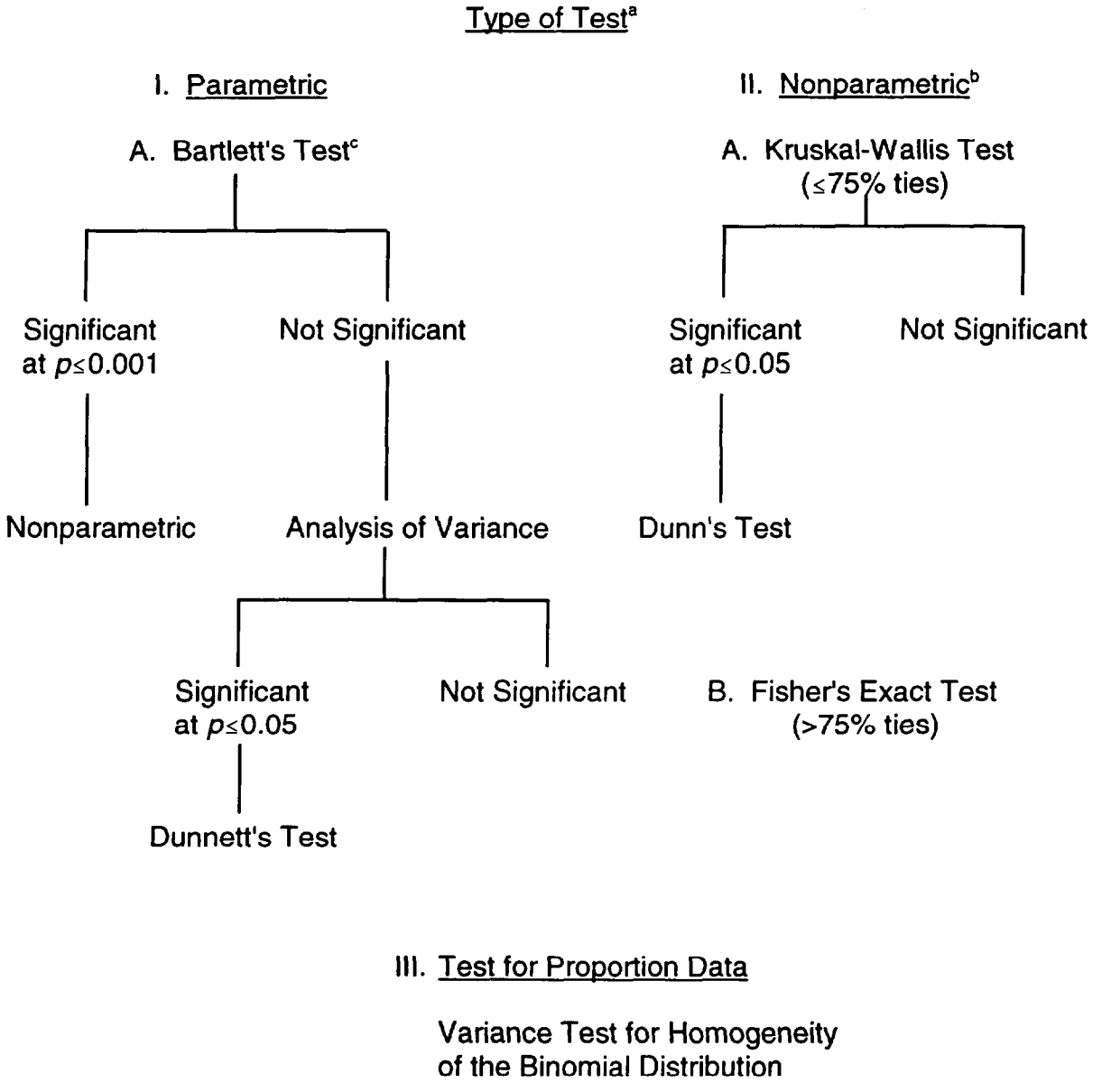
a. See Appendix F, item 9.
b. See Appendix F, items 10 through 12.

The following schematic represents the statistical analyses of data:

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a. Statistically significant probabilities are reported as either $p \leq 0.05$ or $p \leq 0.01$.
b. Proportion data are not included in this category.
c. Test for homogeneity of variance.

Clinical observations and other proportion data were analyzed using the Variance Test for Homogeneity of the Binomial Distribution[9].

Continuous data (e.g., maternal body weights, body weight changes, feed consumption data, organ weights, duration of gestation, litter averages for pup body weights, percent male pups, pup viability and cumulative survival) were analyzed using Bartlett's Test of Homogeneity of Variances[10] and the Analysis of Variance[11], when appropriate [i.e., Bartlett's Test was not significant ($p>0.001$)]. If the Analysis of Variance was significant ($p\leq0.05$), Dunnett's Test[12] was used to identify the statistical significance of the individual groups. If the Analysis of Variance was not appropriate [i.e., Bartlett's Test was significant ($p\leq0.001$)], the Kruskal-Wallis Test[13] was used, when 75% or fewer ties were present; when more than 75% ties were present, Fisher's Exact Test[14] was used. In cases where the Kruskal-Wallis Test was statistically significant ($p\leq0.05$), Dunn's Method of Multiple Comparisons[15] was used to identify the statistical significance of the individual groups.

All other natural delivery data involving discrete data were evaluated using the Kruskal-Wallis Test[13] procedures previously described.

Statistical methods of analysis conducted by subcontractors are described in the appropriate reports.

# III. RESULTS

## Part A - Exposed Premating to Gestation Day 21

### A. Consumed Dosages (Summaries - Tables B1 and B2)

The average actual consumed daily dosages for the female rats for the precohabitation exposure period (calculated as days 1 to 14 of the study) were 0.00, 0.01, 0.08, 0.77 and 23.93 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

The average actual consumed daily dosages for the female rats for the gestation exposure period (calculated as gestation days 0 to 21) were 0.00, 0.01, 0.10, 0.98 and 28.73 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

### B. Mortality, Clinical and Necropsy Observations (Summaries - Tables B3 and B4; Individual Data - Tables B19 and B20)

#### B.1. Mortality

There were no deaths during the premating or gestational periods; all rats survived to scheduled sacrifice.

#### B.2. Clinical Observations

No clinical observations that occurred in the female rats were considered related to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation commonly occurs in this strain of rat.

#### B.3. Necropsy Observations

No necropsy observations were considered related to the test substance in the female rats because the incidences were not dosage-dependent and/or the observation commonly occurs in this strain of rat. These observations included a torn ear in one 0.01 mg/kg/day target dosage group female and numerous clear fluid filled cysts in the cortex of both kidneys in one 0.1 mg/kg/day group female.

### C. Body Weights and Body Weight Changes (Figure 1; Summaries - Tables B5 through B8; Individual Data - Tables B21 and B22)

Average body weights and body weight changes for female rats were comparable among the five exposure groups through the precohabitation and gestation periods. Body weight gains for female rats in the 1.0 and

30.0 mg/kg/day target dosage groups were significantly increased ($p \leq 0.05$ and $p \leq 0.01$, respectively) on DGs 12 to 15, compared to the carrier group. These significant increases were not considered treatment-related because they were transient and only occurred once.

## D. Absolute (g/day) and Relative (g/kg/day) Water Consumption Values (Summaries - Tables B9 through B12; Individual Data - Tables B23 and B24)

Average absolute (g/day) and relative (g/kg/day) water consumption values for female rats during the precohabitation and gestation periods were comparable among the five exposure groups. Absolute water consumption values for female rats in the 0.1 mg/kg/day target dosage group were significantly increased ($p \leq 0.01$) on DGs 15 to 18, compared to the carrier group. This significant increase was not considered treatment-related because it was not dosage-dependent and only occurred once.

## E. Absolute (g/day) and Relative (g/kg/day) Feed Consumption Values (Summaries - Tables B13 through B16; Individual Data - Tables B25 and B26)

Average absolute (g/day) and relative (g/kg/day) feed consumption values for female rats during the precohabitation and gestation periods were comparable among the five exposure groups. Statistical analyses indicated no differences among the groups.

## F. Caesarean-Sectioning and Litter Observations (Summaries - Tables B17 and B18; Individual Data - Tables B27 through B29)

Caesarean-sectioning observations were based on 16 pregnant does on DG 21 in the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day dosage groups, respectively.

Dosages as high as 30.0 mg/kg/day did not affect DG 21 Caesarean-sectioning or litter parameters. The litter averages for corpora lutea, implantations, litter sizes, live and dead fetuses, early and late resorptions, percent resorbed conceptuses, percent male fetuses and fetal body weights were comparable and did not differ significantly in the five exposure groups. All placentae appeared normal.

## G. Terminal Body Weights, Thyroid Weights, Relative Thyroid Weights and Thyroid Histopathology (APPENDIX J)

### G.1. Terminal Body Weights, Thyroid Weights and Relative Thyroid Weights

There were no treatment related or significant differences among the five exposure groups for the DG 21 terminal body weight. The absolute and relative (relative to terminal body weight) thyroid weights in the 30.0 mg/kg/day dams were significantly increased ($p \leq 0.01$) over the carrier group values. Thyroid/parathyroid weights were not collected for DG 21 fetuses.

**DG 21 Dams** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Terminal Body Weight (g) | 412.5 ± 21.1 [16] | 423.2 ± 29.6 [16] | 423.8 ± 22.3 [16] | 424.0 ± 36.5 [16] | 427.0 ± 33.0 [16] |
| Absolute Thyroid Weight (mg) | 18.36 ± 3.10 [14] | 18.81 ± 3.07 [16] | 20.48 ± 2.93 [16] | 21.49 ± 3.68 [15] | 26.28 ± 3.85** [16] |
| Relative Thyroid Weight | 0.04 ± 0.01 [14] | 0.04 ± 0.01 [16] | 0.05 ± 0.01 [16] | 0.05 ± 0.01 [15] | 0.06 ± 0.01** [16] |

a. Mean ± SD., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$

### G.2. Thyroid Histopathology

On DG 21, all 16 dams in the 30.0 mg/kg/day exposure group had decreased colloid. An increased incidence of follicular cell hypertrophy was also present in the 30.0 mg/kg/day exposure group dams.

**DG 21 Dams**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 0/16 | 0/15 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/15 | 14/16 |
| Hyperplasia | 0/16 | 0/16 | 0/16 | 0/15 | 2/16 |

A dose-related increase in the incidence and severity of decreased colloid was present in male and female fetuses in the 1.0 and 30.0 mg/kg/day exposure groups. Follicular cell hypertrophy was not observed in male or female fetuses. No apparent effect was present in the incidence or severity of follicular cell hyperplasia in the dams or fetuses evidenced by the low incidence in all groups.

**DG 21 Male Fetuses**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 2/16 | 0/16 | 12/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/16 |
| Hyperplasia | 0/16 | 0/16 | 0/16 | 1/16 | 0/16 |

**DG 21 Female Fetuses**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 1/16 | 1/16 | 13/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/16 |
| Hyperplasia | 0/16 | 0/16 | 0/16 | 1/16 | 0/16 |

## H. Neurohistology (APPENDIX L)

Histopathologic and morphometric evaluations of the DG 21 fetal brains have not been conducted at this time.

## I. Thyroid and Pituitary Hormone Analyses (APPENDIX K)

Maternal TSH levels were significantly increased ($p \leq 0.001$) and $T_4$ levels were significantly decreased ($p \leq 0.001$) at the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure levels. The maternal $T_3$ level at the 30.0 mg/kg/day exposure level was significantly reduced ($p \leq 0.01$), compared to the carrier group. Changes for all hormone levels occurred in an exposure-dependent manner. These results demonstrate that exposure of female rats to ammonium perchlorate at exposures as low as 0.01 mg/kg/day before and during gestation is sufficient to decrease $T_4$ and trigger an increase in TSH.

**DG 21 Dams [a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 6.05 ± 0.59 | 8.18 ± 0.78*** | 9.09 ± 0.84*** | 9.94 ± 0.98*** | 14.87 ± 1.48*** |
| $T_4$ (µg/dL) | 2.31 ± 0.13 | 2.06 ± 0.23*** | 1.28 ± 0.13*** | 1.19 ± 0.12*** | 1.06 ± 0.11*** |
| $T_3$ (ng/dL) | 99.7 ± 6.0 | 97.3 ± 9.7 | 95.8 ± 6.3 | 93.01 ± 9.0 | 87.4 ± 8.5** |

a. Mean ± SD., N = 14 to 16.
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

Fetal TSH levels were significantly increased ($p \leq 0.01$ or $p \leq 0.001$) at the 1.0 and 30.0 mg/kg/day exposures, $T_4$ levels were significantly decreased ($p \leq 0.01$) at the 30.0 mg/kg/day exposure, and $T_3$ levels were significantly decreased ($p \leq 0.01$ or $p \leq 0.001$) at the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure levels. Changes for all hormone levels occurred in an exposure-dependent manner.

**DG 21 Fetuses** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 7.22 ± 0.71 [16] | 7.29 ± 0.64 [16] | 7.80 ± 0.83 [15] | 8.26± 0.73** [16] | 10.78 ± 1.08*** [16] |
| $T_4$ (µg/dL) | 1.59 ± 0.16 [16] | 1.50 ± 0.14 [14] | 1.47 ± 0.16 [14] | 1.46 ± 0.13 [13] | 1.38 ± 0.12** [13] |
| $T_3$ (ng/dL) | 23.4 ±2.3 [8] | 19.3 ± 2.2** [7] | 16.9 ±1.8*** [8] | 16.7±1.7*** [7] | 15.6 ± 1.1*** [2] |

[a] Mean ± SD., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

Although $T_4$ was significantly decreased ($p \leq 0.001$) at all exposures of ammonium perchlorate in the dams, $T_4$ was only significantly decreased ($p \leq 0.01$) in the fetuses at the highest exposure level, 30.0 mg/kg/day. A similar result occurred for TSH, although the significant increase ($p \leq 0.01$ or $p \leq 0.001$) in fetal TSH levels occurred at 1.0 and 30.0 mg/kg/day. This implies that there may be a compensatory or protective mechanism in the dam or toxicokinetics may cause different levels of fetal exposure.

**Part B - Exposed Premating to Lactation Day 5 or 10**

**A. <u>Consumed Dosages (Summaries - Tables C1 through C3)</u>**

The average actual consumed daily dosages for the female rats for the precohabitation exposure period (calculated as days 1 to 14 of the study) were 0.00, 0.01, 0.08, 0.78 and 23.89 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

The average actual consumed daily dosages for the female rats for the gestation exposure period (calculated as gestation days 0 to 20) were 0.00, 0.01, 0.09, 0.98 and 27.88 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

The average actual consumed daily dosages for the female rats for the lactation exposure period (calculated as lactation days 1 to 10) were 0.00, 0.01, 0.11, 1.26 and 38.32 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

**B. <u>Mortality, Clinical and Necropsy Observations (Summary - Table C4; Individual Data - Tables C27 and C28)</u>**

**B.1. <u>Mortality</u>**

There were no deaths during the premating, gestational and lactation periods; all rats survived to scheduled sacrifices.

### B.2. Clinical Observations

No clinical observations that occurred in the female rats were considered related to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation commonly occurs in this strain of rat.

### B.3. Necropsy Observations

There were no necropsy observations in the female rats; all tissues appeared normal.

## C. Body Weights and Body Weight Changes (Figure 2; Summaries - Tables C5 through C10; Individual Data - Tables C29 through C31)

Average body weights and body weight changes for female rats were comparable among the five exposure groups through the precohabitation, gestation and lactation periods. Body weight gain for female rats in the 1.0 mg/kg/day target dosage group was significantly decreased ($p \leq 0.05$) on DLs 7 to 10, compared to the carrier group. This significant decrease was not considered treatment-related because it was not dosage-dependent and only occurred once.

## D. Absolute (g/day) and Relative (g/kg/day) Water Consumption Values (Summaries - Tables C11 through C16; Individual Data - Tables C32 through C34)

Average absolute (g/day) and relative (g/kg/day) water consumption values for female rats during the precohabitation, gestation and lactation periods were comparable among the five exposure groups and did not differ significantly.

## E. Absolute (g/day) and Relative (g/kg/day) Feed Consumption Values (Summaries - Tables C17 through C22; Individual Data - Tables C35 through C37)

Average absolute (g/day) and relative (g/kg/day) feed consumption values for female rats during the precohabitation, gestation and lactation periods were comparable among the five exposure groups. Statistical analyses indicated no differences among the groups.

## F. Litter Observations (Summaries - Tables C23 and C24; Individual Data - Tables C38 through C41)

There were 16 pregnant dams that delivered and were selected for evaluation in each of the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

Natural delivery observations were unaffected by targeted dosages of the test substance as high as 30.0 mg/kg/day. The gestation index (number of rats with live offspring per number of pregnant rats) was 100% in each of the five exposure groups. The number of dams delivering litters, the duration of gestation, averages for implantations, live litter sizes and stillbirths, dams with stillborn pups, viability and lactation indices, sex ratios and pup body weights were comparable among the five exposure groups and did not significantly differ.

## G. Pup Clinical and Necropsy Observations From Birth to Day 10 Postpartum (Summaries - Tables C25 and C26; Individual Data - Tables C42 and C43)

All clinical and necropsy observations in the F1 generation pups were considered unrelated to the test substance.

## H. Terminal Body Weights, Thyroid Weights, Relative Thyroid Weights and Thyroid Histopathology (APPENDIX J)

### H.1. Terminal Body Weights, Thyroid Weights and Relative Thyroid Weights

There were no treatment related or significant differences among the five exposure groups for the DL 10 terminal body weight. The absolute and relative (relative to terminal body weight) thyroid weight in the 30.0 mg/kg/day dams were significantly increased ($p \leq 0.01$) over the carrier group.

**DL 10 Dams [a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Terminal Body Weight (g) | 343.6 ± 20.8 [16] | 339.8 ± 22.0 [16] | 330.9 ± 20.6 [16] | 330.8 ± 27.4 [16] | 340.2 ± 21.2 [16] |
| Absolute Thyroid Weight (mg) | 20.53 ± 3.68 [16] | 20.15 ± 3.74 [15] | 18.78 ± 3.29 [16] | 19.49 ± 3.71 [16] | 30.07 ± 3.09** [16] |
| Relative Thyroid Weight | 0.06 ± 0.01 [16] | 0.06 ± 0.01 [15] | 0.06 ± 0.01 [16] | 0.06 ± 0.01 [16] | 0.09 ± 0.01** [16] |

a. Mean ± SD., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$

The absolute thyroid weight of the DL 5 male pups in the 30.0 mg/kg/day exposure group was significantly increased ($p \leq 0.01$) over the carrier group value. There were no significant differences in absolute thyroid weights among the DL 5 female pups.

**DL 5 Male and Female Pups[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Male Absolute Thyroid Weight (mg) | 1.49 ± 0.30 [16] | 1.59 ± 0.34 [15] | 1.67 ± 0.34 [16] | 1.80 ± 0.56 [16] | 2.14 ± 0.41** [16] |
| Female Absolute Thyroid Weight (mg) | 1.33 ± 0.40 [16] | 1.29 ± 0.36 [16] | 1.45 ± 0.39 [16] | 1.36 ± 0.43 [16] | 1.42 ± 0.63 [16] |

a. Mean ± SD., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$

The absolute thyroid weights of the DL 10 male pups in the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups were significantly increased ($p \leq 0.05$ or $p \leq 0.01$) over the carrier group value. The absolute thyroid weight of the DL 10 female pups in the 30.0 mg/kg/day exposure group was significantly increased ($p \leq 0.01$) over the carrier group value.

**DL 10 Male and Female Pups[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Male Absolute Thyroid Weight (mg) | 2.26 ± 0.70 [14] | 2.91 ± 0.40* [16] | 3.24 ± 0.65** [16] | 3.43 ± 0.67** [16] | 4.12 ± 0.80** [16] |
| Female Absolute Thyroid Weight (mg) | 3.02 ± 0.79 [15] | 2.96 ± 0.56 [15] | 2.93 ± 0.55 [16] | 3.05 ± 0.56 [15] | 3.85 ± 0.52** [14] |

a. Mean ± SD., [N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

## H.2. Thyroid Histopathology

At DL 5, an exposure-related increase in the incidence and severity of decreased colloid was present in male and female pups in the 1.0 and 30.0 mg/kg/day exposure groups (all male and female pups in the 30.0 mg/kg/day exposure group had decreased colloid). No apparent effect on the incidence or severity of follicular cell hyperplasia was noted due to the low incidences in all groups of male and female pups. Follicular cell hypertrophy was not present in any male or female pups.

**DL 5 Male Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 2/16 | 0/16 | 4/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/16 |
| Hyperplasia | 0/16 | 0/16 | 1/16 | 2/16 | 0/16 |

**DL 5 Female Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 0/16 | 6/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/16 |
| Hyperplasia | 1/16 | 1/16 | 4/16 | 1/16 | 1/16 |

An exposure-related increase in the incidence and severity of decreased colloid was present in the 1.0 and 30.0 mg/kg/day exposure group dams sacrificed on DL 10 (all dams in the 30.0 mg/kg/day exposure group had decreased colloid). An increased number of dams had follicular cell hyperplasia and follicular cell hypertrophy was present in all 30.0 mg/kg/day exposure group dams.

**DL 10 Dams**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 1/16 | 1/16 | 5/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 1/16 | 0/16 | 16/16 |
| Hyperplasia | 0/16 | 0/16 | 1/16 | 2/16 | 9/16 |

Decreased colloid was present in all DL 10 male pups in the 30.0 mg/kg/day exposure group, and an exposure-related increase in the incidence and severity of decreased colloid was present in the DL 10 female pups in the 1.0 and 30.0 mg/kg/day exposure groups (all female pups in the 30.0 mg/kg/day exposure group had decreased colloid). No apparent effect on the incidence or severity of follicular cell hyperplasia was present in male or female pups due to the low incidence in all groups. Follicular cell hypertrophy was not present in male or female pups.

**DL 10 Male Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 1/16 | 1/16 | 1/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/16 |
| Hyperplasia | 2/16 | 0/16 | 0/16 | 3/16 | 1/16 |

**DL 10 Female Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 1/16 | 4/16 | 15/15 |
| Hypertrophy | 0/16 | 0/16 | 0/16 | 0/16 | 0/15 |
| Hyperplasia | 1/16 | 1/16 | 1/16 | 0/16 | 1/15 |

The significantly increased thyroid weights in the 30.0 mg/kg/day exposure dams sacrificed on DL 10 correlated to the follicular cell hypertrophy in this group. Follicular cell hyperplasia may also have contributed to the increased thyroid weights in the 30.0 mg/kg/day exposure dams. Follicular cell hypertrophy was not apparent by light microscopy morphological evaluation in male and female pups and, therefore, the statistically significant increased thyroid weights seen in pups had no obvious histomorphologic correlate.

## I. Thyroid and Pituitary Hormone Analyses (APPENDIX K)

Maternal TSH values were significantly increased ($p \leq 0.01$ or $p \leq 0.001$) at all treatment levels; increases occurred in an exposure-dependent manner. A similar increase in TSH was also seen in pregnant rats at DG 21. $T_4$ levels were decreased with increasing exposure; these changes were significant ($p \leq 0.05$) only at the 30.0 mg/kg/day exposure. Maternal $T_3$ levels were decreased with increasing exposure, however these changes were not statistically significant.

**DL 10 Dams** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH(ng/mL) | 5.07 ± 0.54 | 6.33 ± 0.71** | 6.52 ± 0.73*** | 6.90 ± 0.76*** | 11.61±1.26*** |
| $T_4$ (µg/dL) | 4.03 ± 0.45 | 3.76 ± 0.39 | 3.75 ± 0.37 | 3.70 ± 0.44 | 3.59 ± 0.42* |
| $T_3$ (ng/dL) | 99.9 ± 10.9 | 98.2 ± 11.6 | 98.0 ± 11.3 | 97.7 ± 10.7 | 92.0 ± 9.5 |

a. Mean ± S.D., N = 16
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

TSH levels in DL 5 pups increased in an exposure-dependent manner; these increases were not significantly different in treatment groups as compared to the carrier control group. $T_4$ and $T_3$ levels decreased with increasing dose; the levels of both hormones were significantly decreased ($p \leq 0.05$ or $p \leq 0.01$) in the 1.0 and 30.0 mg/kg/day groups.

**DL 5 Pups** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 4.86 ± 0.50 [16] | 4.93 ± 0.58 [16] | 5.13 ± 0.54 [15] | 5.28 ± 0.60 [15] | 5.29 ± 0.62 [16] |
| $T_4$ (µg/dL) | 2.08 ± 0.24 [12] | 1.83 ± 0.21 [11] | 1.80 ± 0.18 [12] | 1.79 ± 0.21** [14] | 1.70 ± 0.20** [9] |
| $T_3$ (ng/dL) | 62.1 ± 6.6 [15] | 57.2 ± 6.4 [15] | 56.5 ± 5.2 [15] | 55.4 ± 5.5* [15] | 53.9 ± 6.1* [11] |

a. Mean ± S.D., [N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

TSH levels in DL 10 pups were significantly increased ($p \leq 0.001$) only in the 30.0 mg/kg/day exposure group. The $T_4$ values were not significantly decreased. $T_3$ values were significantly decreased ($p \leq 0.001$) at the 1.0 and 30.0 mg/kg/day exposure levels. Again, all hormone changes occurred in an exposure-dependent manner. Hormonal levels were similar between the DL5 and DL10 pups.

**DL 10 Pups** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 6.64 ± 0.72 | 7.22 ± 0.78 | 7.25 ± 0.71 | 7.33 ± 0.74 | 8.88 ± 0.93*** |
| $T_4$ (µg/dL) | 3.73 ± 0.41 | 3.73 ± 0.36 | 3.50 ± 0.42 | 3.37 ± 0.35 | 3.35 ± 0.38 |
| $T_3$ (ng/dL) | 79.5 ± 6.6 | 75.2 ± 8.1 | 74.4 ± 8.0 | 66.2 ± 6.5*** | 64.4 ± 7.6*** |

a. Mean ± S.D., N = 16
*** Significantly different from carrier group, $p \leq 0.001$

## J. Neurohistology (APPENDIX L)

Histopathologic and morphometric evaluations of the DL 5 pup brains have not been conducted at this time.

### J.1. Neuropathology

Detailed microscopic examination of multiple coronal sections from DL 10 pups in each of the 0.0 and 30.0 mg/kg/day exposure groups failed to indicate any evidence of treatment-related neuropathologic alterations or of microscopic developmental anomalies. As would be expected, the brains from the DL 10 rats were characterized by active cellular migration and cell death (*i.e.* physiologic cell death or "apoptosis") as well as ventricular remodeling. However, no differences were found between the test-substance treated and the control group rats in the degrees of cell death or in the overall pattern of brain morphology.

### J.2. Morphometry

The mean values for the linear dimensions of a number of brain regions for both male and female rats were found to be either significantly greater or lesser in certain test substance-treated rat groups in comparison to the comparable control group values.

For the male rats, the test substance appeared to have a trophic effect, with a number of brain regions in certain test substance-treated groups being of significantly greater dimension in comparison to control group values. Even so, there was no evidence of any obvious treatment-related effects on male rat brain weights. Statistically significant differences were found for some brain structures

in all male treatment groups except in the 0.01 mg/kg/day exposure group, suggesting that 0.01 mg/kg/day may be a no-effect level for the male rat. A total of 12 mean measurements were significantly increased in some test substance-treated male rat groups *vs.* male control group values. Two were increased in the 0.1 mg/kg/day exposure group, nine in the 1.0 mg/kg/day exposure group and one in the 30.0 mg/kg/day exposure group. The reason for the apparent enhanced effect in the 1.0 mg/kg/day exposure group is not known. The most consistent treatment-related effect in the male rats was on the thickness of the corpus callosum, with both the right and left-sided measures of the thickness of this white matter tract being significantly greater (*vs.* control group values) for the male rats in exposed to 0.1 and 1.0 mg/kg/day.

## DL 10 Male Pup Brain Morphometry

| Group<br>Target Dosage (mg/kg/day) | Group I<br>(Carrier) | Group II<br>(0.01) | Group III<br>(0.1) | Group IV<br>(1.0) | Group V<br>(30.0) |
|---|---|---|---|---|---|
| N | 14 | 14 | 11 | 16 | 15 |
| Brain Weights (g) | 1.104±0.108 | 1.076±0.110 | 1.087±0.089 | 1.120±0.089 | 1.148±0.126 |
| Ant/Post Cerebrum (mm) | 11.9±0.5 | 12.0±0.5 | 12.0±0.4 | 12.2±0.3 | 12.1±0.4 |
| Ant/Post Cerebellum (mm) | 4.9±0.3 | 4.9±0.5 | 4.8±0.5 | 5.0±0.3 | 4.9±0.6 |
| Right Frontal Cortex (μ) | 1082±103.7 | 1142±156.0 | 1145±102.4 | 1224±107.0** | 1131±106.1 |
| Left Frontal Cortex (μ) | 1114±103.0 | 1150±146.0 | 1137±98.5 | 1247±79.6** | 1155±134.8 |
| Right Parietal Cortex (μ) | 1272±75.3 | 1289±147.2 | 1329±140.5 | 1380±78.4* | 1328±92.4 |
| Left Parietal Cortex (μ) | 1285±120.6<br>[13] | 1275±115.2 | 1322±130.8 | 1398±72.5* | 1306±123.0 |
| Right Striatum (μ) | 2001±167.0<br>[13] | 1956±146.1 | 1975±91.1 | 2078±72.8 | 2038±104.8 |
| Left Striatum (μ) | 2002±133.7 | 1958±120.8 | 1985±73.7 | 2104±70.0* | 2040±130.2 |
| Rt. Corpus Callosum (μ) | 307±36.1<br>[13] | 293±40.0<br>[13] | 384±72.5**<br>[10] | 374±52.0** | 347±52.2 |
| Lft. Corpus Callosum (μ) | 316±48.6 | 290±36.4<br>[13] | 381±79.2*<br>[9] | 391±59.8** | 350±53.6 |
| Rt. Hippocampus (μ) | 926±86.1 | 927±81.3 | 936±62.6 | 1005±86.7* | 949±70.2 |
| Lft. Hippocampus (μ) | 927±52.9 | 924±97.3 | 914±52.0 | 950±67.3 | 949±87.4 |
| Right Dentate (μ) | 449±50.2 | 468±57.8 | 447±74.6 | 494±65.0 | 456±51.3 |
| Left Dentate (μ) | 453±36.3 | 470±60.8 | 445±48.4 | 474±53.7 | 475±70.4 |
| Right CA1 (μ) | 468±43.9 | 451±45.3 | 482±27.3 | 507±39.1* | 491±44.3 |
| Left CA1 (μ) | 473±57.6 | 444±52.2 | 460±21.0 | 471±27.5 | 466±41.4 |
| Right CA3 (μ) | 291±43.0 | 297±27.6 | 279±39.1 | 321±53.2 | 296±34.7 |
| Left CA 3 (μ) | 274±26.1 | 285±35.0 | 271±32.4 | 282±22.3 | 304±33.5* |
| Cerebellum (μ) | 2822±234.5 | 2685±242.9 | 2904±263.2<br>[10] | 2829±190.0 | 2921±311.0<br>[14] |
| External Germinal Layer (μ) | 36±4.7 | 36±4.0 | 37±4.7 | 38±4.2 | 40±5.4 |

[N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

While certain neuroanatomic structures were of greater dimension in treated male rats in comparison to control group values, a bimorphic sex-related pattern was evident in this study. For the female rats, numerous brain regions were slightly attenuated in comparison to female control group values. However, there

was no evidence of dose-related enhancement for these differences. For the CA1 region of the hippocampus, significant differences from control group values were noted for both the female rats in the 0.1 and 1.0 mg/kg/day exposure groups. The lack of any dose-enhancing effects in the female rats suggests the possibility that the control group values in this study may not have been representative. Although the mean thicknesses of the external germinal (granular) layer of the cerebellum were significantly thinner for the female rats in the 0.01 and 0.1 mg/kg/day exposure groups in comparison to the female rats in the control group, this layer is highly variable in thickness and, therefore, difficult to assess accurately with only six linear measurements. The inter-group differences in thickness of the external granular layer are, therefore, considered to be of no biologic significance.

## DL 10 Female Pup Brain Morphometry

| Group<br>Target Dosage (mg/kg/day) | Group I<br>(Carrier) | Group II<br>(0.01) | Group III<br>(0.1) | Group IV<br>(1.0) | Group V<br>(30.0) |
|---|---|---|---|---|---|
| N | 16 | 16 | 15 | 15 | 15 |
| Brain Weights (g) | 1.104±0.123 | 1.063±0.128 | 1.016±0.131 | 1.091±0.107 | 1.081±0.097 |
| Ant/Post Cerebrum (mm) | 12.1±0.6 | 11.8±0.5 | 11.7±0.5 | 12.1±0.5 | 12.1±0.5 |
| Ant/Post Cerebellum (mm) | 5.1±0.5 | 4.9±0.5 | 4.9±0.5 | 5.0±0.4 | 4.9±0.3 |
| Right Frontal Cortex (μ) | 1134±124.1 | 1170±111.4 | 1123±108.2 | 1261±132.7* | 1147±108.2 |
| Left Frontal Cortex (μ) | 1155±121.3<br>[15] | 1150±95.4 | 1142±135.4 | 1246±130.3 | 1197±123.6 |
| Right Parietal Cortex (μ) | 1332±122.4 | 1325±103.8 | 1280±102.9 | 1400±130.1 | 1357±142.5 |
| Left Parietal Cortex (μ) | 1319±113.8 | 1319±88.7 | 1274±119.1 | 1406±128.9 | 1336±144.5 |
| Right Striatum (μ) | 1983±145.8 | 1931±142.4 | 1858±143.9*<br>[14] | 2074±145.9 | 1995±76.4 |
| Left Striatum (μ) | 1979±110.5 | 1942±111.7 | 1859±147.1* | 2070±147.8 | 2045±96.1 |
| Rt. Corpus Callosum (μ) | 338±51.9 | 313±58.0 | 289±50.3 | 327±68.5<br>[14] | 291±61.1 |
| Lft. Corpus Callosum (μ) | 343±54.2<br>[15] | 308±61.6 | 292±40.6 | 324±69.5<br>[14] | 298±56.9 |
| Rt. Hippocampus (μ) | 997±95.5<br>[15] | 950±72.8 | 895±82.2*<br>[13] | 946±98.0 | 938±81.4 |
| Lft. Hippocampus (μ) | 947±69.0<br>[15] | 912±78.4 | 859±89.4*<br>[14] | 910±85.3 | 922±77.5<br>[14] |
| Right Dentate (μ) | 472±78.4<br>[15] | 460±65.1 | 434±50.4<br>[13] | 478±61.2 | 458±57.7 |
| Left Dentate (μ) | 467±65.3<br>[15] | 456±60.1 | 434±72.6<br>[14] | 466±47.8 | 461±55.8<br>[14] |
| Right CA1 (μ) | 510±50.1<br>[15] | 474±43.4 | 460±39.0**<br>[13] | 469±46.1* | 475±33.0 |
| Left CA1 (μ) | 469±28.5<br>[15] | 444±30.4 | 427±30.0**<br>[14] | 437±30.4* | 453±37.5<br>[14] |
| Right CA3 (μ) | 312±52.9<br>[15] | 300±43.8 | 284±50.8<br>[13] | 291±53.6 | 291±52.0 |
| Left CA 3 (μ) | 275±36.1<br>[15] | 272±35.8 | 266±48.4<br>[14] | 267±36.1 | 283±51.7<br>[14] |
| Cerebellum (μ) | 2838±280.4 | 2653±274.8<br>[15] | 2633±287.3<br>[14] | 2691±250.4 | 2848±255.1 |
| External Germinal Layer (μ) | 39±4.3 | 33±5.4** | 35±2.7* | 38±4.5 | 36±3.5 |

[N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

## Part C - Exposed Premating to Lactation Day 22

### A. Consumed Dosages (Summaries - Tables D1 through D3)

The average actual consumed daily dosages for the female rats for the precohabitation exposure period (calculated as days 1 to 14 of the study) were 0.00, 0.01, 0.09, 0.77 and 23.59 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

The average actual consumed daily dosages for the female rats for the gestation exposure period (calculated as gestation days 0 to 20) were 0.00, 0.01, 0.09, 0.94 and 28.41 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

The average actual consumed daily dosages for the female rats for the lactation exposure period (calculated as lactation days 1 to 10) were 0.00, 0.01, 0.12, 1.26 and 38.32 mg/kg/day for the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

### B. Mortality, Clinical and Necropsy Observations (Summaries - Tables D4 and D5; Individual Data - Tables D28 and D29)

#### B.1. Mortality

There were no deaths during the premating, gestational or lactational periods; all rats survived to scheduled sacrifice.

#### B.2. Clinical Observations

No clinical observations that occurred in the female rats were considered related to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation commonly occurs in this strain of rat.

#### B.3. Necropsy Observations

No necropsy observations were considered related to the test substance in the female rats because the incidences were not dosage-dependent and/or the observation commonly occurs in this strain of rat.

### C. Body Weights and Body Weight Changes (Figure 3; Summaries - Tables D6 through D11; Individual Data - Tables D30 through D32)

Average body weights and body weight changes for female rats were comparable among the five exposure groups through the precohabitation, gestation and lactation periods and did not differ significantly.

## D. Absolute (g/day) and Relative (g/kg/day) Water Consumption Values (Summaries - Tables D12 through D17; Individual Data - Tables D33 through D35)

Average absolute (g/day) and relative (g/kg/day) water consumption values for female rats during the precohabitation, gestation and lactation periods were comparable among the five exposure groups. Relative water consumption values for female rats in the 0.1 mg/kg/day target dosage group were significantly increased ($p \leq 0.05$) during the precohabitation period on DSs 7 to 14 and 1 to 14. Absolute water consumption values for female rats in the 0.01 mg/kg/day target dosage group were significantly increased ($p \leq 0.01$) during the lactation period on DLs 4 to 7, 7 to 14 and 1 to 14, compared to the carrier group. These significant increases were not considered treatment-related because they were not dosage-dependent.

## E. Absolute (g/day) and Relative (g/kg/day) Feed Consumption Values (Summaries - Tables D18 and D23; Individual Data - Tables D36 through D38)

Average absolute (g/day) and relative (g/kg/day) feed consumption values for female rats during the precohabitation, gestation and lactation periods were comparable among the five exposure groups. Absolute feed consumption values for female rats in the 0.01 and 0.1 mg/kg/day target dosage groups were significantly increased ($p \leq 0.05$ and $p \leq 0.01$, respectively) during the lactation period on DLs 7 to 14, compared to the carrier group. These significant increases were not considered treatment-related because they were not dosage-dependent.

## F. Litter Observations (Summaries - Tables D24 and D25; Individual Data - Tables D39 through D42)

There were 15 or 16 pregnant dams that delivered and were selected and evaluated in each of the 0 (Carrier), 0.01, 0.1, 1.0 and 30.0 mg/kg/day target dosage groups, respectively.

Natural delivery observations were unaffected by targeted dosages of the test substance as high as 30.0 mg/kg/day. The gestation index (number of rats with live offspring per number of pregnant rats) was 100% in each of the five exposure groups. The number of dams delivering litters, the duration of gestation, averages for implantations, live litter sizes and stillbirths, dams with stillborn pups, viability and lactation indices and pup sex ratios were comparable among the five exposure groups and did not significantly differ.

Pup body weights per litter were significantly increased ($p \leq 0.05$ and $p \leq 0.01$) in the 0.01, 0.1, 1.0 and or 30.0 mg/kg/day exposure group DLs 5 (pre- and

postculling), 8, 14 and/or 22, when compared to the carrier group values. These significant increases were not considered treatment-related because the expected effect of a toxicant would be a decrease, rather than an increase, in the body weights.

## G. Clinical and Necropsy Observations F1 Generation Rats (Summaries - Tables D26 and D27; Individual Data - Tables D43 and D44)

All clinical observations in the F1 generation pups were considered unrelated to the test substance.

No necropsy observations on postpartum day 22 were considered related to the test substance in the F1 generation rats because the incidences were not dosage-dependent and/or the observation occurred in only one rat in a group.

## H. Terminal Body Weights, Thyroid Weights, Relative Thyroid Weights and Thyroid Histopathology (APPENDIX J)

### H.1. Terminal Body Weights, Thyroid Weights and Relative Thyroid Weights

There were no treatment related or significant differences among the five exposure groups in the DL 22 terminal body weights. The absolute and relative (relative to terminal body weight) thyroid weights in the 30.0 mg/kg/day DL 22 dams were significantly increased ($p \leq 0.01$) over the carrier group values.

**DL 22 Dams** [a]

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Terminal Body Weight (g) | 329.6 ± 20.6 [16] | 336.3 ± 26.6 [16] | 330.5 ± 18.2 [15] | 325.8 ± 25.0 [16] | 333.6 ± 24.0 [16] |
| Absolute Thyroid Weight (mg) | 21.14 ± 2.92 [16] | 20.84 ± 3.03 [16] | 22.37 ± 4.04 [15] | 20.17 ± 3.63 [16] | 30.54 ± 3.64** [16] |
| Relative Thyroid Weight | 0.06 ± 0.01 [16] | 0.06 ± 0.01 [16] | 0.07 ± 0.01 [15] | 0.06 ± 0.01 [16] | 0.09 ± 0.01** [16] |

a. Mean ± S.D., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$

The weight of the thyroid was significantly increased ($p \leq 0.05$ or $p \leq 0.01$) for the female pups in the 1.0 mg/kg/day exposure group and for the male and female pups in the 30.0 mg/kg/day exposure group. The absolute thyroid weight was significantly reduced ($p \leq 0.05$) in the 1.0 mg/kg/day exposure group male pups.

**DL 22 Male and Female Pups [a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Male Absolute Thyroid Weight (mg) | 7.16 ± 1.35 [16] | 7.09 ± 0.80 [16] | 5.91 ± 1.27 [15] | 4.68 ±1.67* [16] | 11.03 ± 1.89** [16] |
| Female Absolute Thyroid Weight (mg) | 6.05 ± 1.36 [16] | 6.39 ± 1.22 [16] | 6.61 ± 1.03 [15] | 7.28 ± 0.96* [14] | 8.76 ±1.47** [16] |

a. Mean ± S.D., [N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

## H.2. Thyroid Histopathology

On DL 22, all dams in the 30.0 mg/kg/day exposure group had decreased colloid. An increased incidence of follicular cell hyperplasia was present in the 1.0 and 30.0 mg/kg/day dams and an increased incidence of follicular cell hypertrophy occurred in the 30.0 mg/kg/day dams.

**DL 22 Dams**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 1/15 | 1/16 | 16/16 |
| Hypertrophy | 0/16 | 0/16 | 0/15 | 0/16 | 14/16 |
| Hyperplasia | 3/16 | 4/16 | 5/15 | 10/16 | 10/16 |

Male and female pups sacrificed on DL 22 in the 30.0 mg/kg/day exposure group had an increased incidence of decreased colloid. No apparent effect on follicular cell hyperplasia or hypertrophy was noted in male or female pups due to the low incidence and lack of a dose response.

**DL 22 Male Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 0/15 | 0/16 | 11/16 |
| Hypertrophy | 0/16 | 0/16 | 0/15 | 0/16 | 0/16 |
| Hyperplasia | 0/16 | 1/16 | 1/15 | 1/16 | 3/16 |

**DL 22 Female Pups**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| Decreased Colloid | 0/16 | 0/16 | 0/15 | 0/15 | 12/16 |
| Hypertrophy | 0/16 | 0/16 | 0/15 | 0/15 | 0/16 |
| Hyperplasia | 1/16 | 0/16 | 3/15 | 3/15 | 1/16 |

The significantly increased thyroid weights in the 30.0 mg/kg/day exposure dams sacrificed on DL 22 correlated to the follicular cell hypertrophy observed in this group. Follicular cell hyperplasia may also have contributed to the increased thyroid weights in the 30.0 mg/kg/day exposure group dams. Follicular cell hypertrophy was not apparent by light microscopy morphological evaluation in male and female pups and, therefore, the statistically significant increased thyroid weights seen in pups had no obvious histomorphologic correlate.

## I. Thyroid and Pituitary Hormone Analyses (APPENDIX K)

Maternal TSH values were significantly increased ($p \leq 0.001$) at the 0.1, 1.0 and 30.0 mg/kg/day exposure levels; increases occurred in an exposure-dependent manner. A similar increase in TSH was also seen in pregnant rats at DG 21. $T_4$ levels were decreased with increasing exposure; these changes were significant ($p \leq 0.01$) only at the 30.0 mg/kg/day exposure. Maternal $T_3$ levels were decreased with increasing exposure; however, these changes were not statistically significant.

**DL 22 Dams[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH(ng/mL) | 6.93 ± 0.73 | 7.39 ± 0.76 | 8.11 ± 0.87*** | 8.15 ± 0.79*** | 10.11±1.12*** |
| $T_4$ (µg/dL) | 3.52 ± 0.38 | 3.51 ± 0.29 | 3.47 ± 0.35 | 3.29 ± 0.34 | 3.14 ± 0.34** |
| $T_3$ (ng/dL) | 120.3 ±12.4 | 119.9 ± 13.3 | 117.6 ± 12.5 | 115.7 ± 10.2 | 112.6 ± 11.9 |

a. Mean ± S.D., N = 15 to 17
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

TSH levels in DL 5 culled pups increased in an exposure-dependent manner; reaching statistical significance ($p \leq 0.01$) at the 1.0 and 30.0 mg/kg/day exposure levels. $T_4$ serum levels decreased with increasing dose; the levels were significantly decreased ($p \leq 0.001$) in all treatment groups. Culled pup $T_3$ levels were decreased with increasing exposure, however these changes were not statistically significant.

**DL 5 Culled Pups[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 5.71 ± 0.66 [15] | 5.92 ± 0.68 [17] | 5.97 ± 0.53 [15] | 6.49 ± 0.66** [16] | 6.50 ± 0.68** [16] |
| $T_4$ (µg/dL) | 2.46 ± 0.27 [15] | 2.14 ± 0.24*** [17] | 2.11 ± 0.23*** [15] | 2.05 ±0.22*** [16] | 2.01 ± 0.22*** [16] |
| $T_3$ (ng/dL) | 96.3 ± 10.6 [11] | 92.4 ± 9.8 [16] | 91.7 ± 10.5 [9] | 90.8 ± 10.1 [12] | 89.5 ± 6.8 [13] |

a Mean ± S.D., [N] = Number of values averaged.
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

TSH and $T_4$ serum levels were significantly different at all exposure levels in the DL 22 male pups. TSH was significantly increased ($p \leq 0.01$) in the 0.01 mg/kg/day exposure group and significantly increased ($p \leq 0.001$) in the 0.1, 1.0 and 30.0 mg/kg/day exposure groups and $T_4$ levels were significantly decreased ($p \leq 0.001$) in the 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups. $T_3$ levels were also significantly decreased ($p \leq 0.05$ or $p \leq 0.01$) in the 1.0 and 30.0 mg/kg/day exposure groups.

**DL 22 Male Pups[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 3.63 ± 0.39 [15] | 4.17 ± 0.42** [17] | 4.94 ± 0.54*** [15] | 4.96 ± 0.58*** [16] | 5.30 ± 0.52*** [16] |
| $T_4$ (µg/dL) | 3.97 ± 0.46 [15] | 3.34 ± 0.38*** [17] | 3.31 ± 0.36*** [15] | 3.28 ± 0.34*** [16] | 3.23 ± 0.28*** [16] |
| $T_3$ (ng/dL) | 191.0 ± 20.0 [15] | 185.3 ± 20.3 [17] | 184.2 ± 19.8 [15] | 173.1 ± 19.7* [16] | 168.1 ± 17.2** [16] |

a. Mean ± S.D., [N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$
*** Significantly different from carrier group, $p \leq 0.001$

TSH levels were increased in the DL 22 female pups at all exposure levels, reaching significance ($p \leq 0.001$) in the 0.1, 1.0 and 30.0 mg/kg/day exposure groups. $T_4$ levels were decreased with increased exposure but did not reach statistical significance. $T_3$ levels were significantly decreased ($p \leq 0.05$) only in the 30.0 mg/kg/day exposure group.

**DL 22 Female Pups[a]**

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg/day) | Group III (0.1 mg/kg/day) | Group IV (1.0 mg/kg/day) | Group V (30.0 mg/kg/day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 5.26 ± 0.47 [15] | 5.41 ± 0.54 [17] | 6.17 ± 0.61*** [15] | 6.26 ± 0.66*** [16] | 7.40 ± 0.71*** [16] |
| $T_4$ (µg/dL) | 3.62 ± 0.39 [15] | 3.57 ± 0.41 [17] | 3.51 ± 0.39 [15] | 3.44 ± 0.36 [16] | 3.41 ± 0.39 [16] |
| $T_3$ (ng/dL) | 169.3 ± 15.6 [15] | 161.3 ± 16.5 [17] | 161.2 ± 13.0 [15] | 158.6 ± 13.3 [16] | 156.0 ± 16.2* [16] |

a Mean ± S.D., [N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
*** Significantly different from carrier group, $p \leq 0.001$

## J. Neurohistology (APPENDIX L)

### J.1. Neuropathology

Detailed microscopic examination of multiple brain sections from DL 22 pups in each of the 0.0, 0.01, 0.1, 1.0 and 30.0 mg/kg/day exposure groups failed to indicate any evidence of treatment-related neuropathologic effects.

### J.2. Morphology

For the male rats, there was a trend for increased linear dimensions in a number of brain regions, especially for the posterior level of the corpus callosum and, to a lesser extent, for certain hippocampal and cortical thickness measures. For the female rats, the pattern was reversed. The female data was more variable between groups, with some dimensions being of lesser value and some of greater value than for the female control group. However, for both the male and female rat groups, the means of the full thickness of the cerebellum were found to be thicker for all of the test substance-exposed groups than for the comparable control group. These increases were statistically significant for the male rats in the 0.01, 0.1 and 1.0 mg/kg/day test substance-treated groups, as well as for female rats in the 0.01 and 1.0 mg/kg/day exposure groups.

The pattern of inter-group differences seen in the morphometric parameters for the postpartum day 22 rats are similar to those encountered with the postpartum day 10 rats present on this study, even though the slides of brain tissue from the rats of these two ages were produced at two different histology laboratories. At both age points, the brains of male rats tended to have a number of neuroanatomic regions that were thicker than similar regions in control group brains, while the reverse trend was present for the females. No effect was seen on the thickness/height of the cerebellum at day 10, however. These data suggest not only a treatment-related effect on brain development but that there may also be some degree of sexual dimorphism regarding response of rats to the test substance.

## DL 22 Male Pup Brain Morphometry

| Group<br>Target Dosage (mg/kg/day) | Group I<br>(Carrier) | Group II<br>(0.01) | Group III<br>(0.1) | Group IV<br>(1.0) | Group V<br>(30.0) |
|---|---|---|---|---|---|
| N | 16 | 16 | 15 | 16 | 16 |
| Brain Weights (g) | 1.775±0.063 | 1.808±0.089 | 1.813±0.069 | 1.832±0.048 | 1.797±0.056 |
| Ant/Post Cerebrum (mm) | 14.3±0.2 | 14.4±0.4 | 14.4±0.29 | 14.4±0.3 | 14.4±0.3 |
| Ant/Post Cerebellum (mm) | 7.0±0.3 | 7.0±0.3 | 7.0±0.3 | 7.1±0.2 | 6.9±0.2 |
| Right Frontal Cortex (μ) | 1815±72.7 | 1840±102.5 | 1866±68.2 | 1858±66.7 | 1904±100.2* |
| Left Frontal Cortex (μ) | 1767±65.5 | 1797±95.9 | 1869±96.4** | 1828±68.0 | 1839±68.4* |
| Right Parietal Cortex (μ) | 1835±74.9 | 1839±87.1 | 1883±66.6 | 1860±51.1 | 1908±76.4* |
| Left Parietal Cortex (μ) | 1775±62.9 | 1812±94.0 | 1854±58.4** | 1815±37.1 | 1832±52.4* |
| Right Striatum (μ) | 2820±144.0 | 2784±199.8 | 2893±98.5 | 2832±165.4 | 2976±170.1* |
| Left Striatum (μ) | 2862±141.2 | 2802±176.0 | 2810±102.4 | 2814±153.7 | 2949±146.6 |
| Rt. Corpus Callosum #1 (μ) | 224±43.5 | 211±40.7 | 218±39.7 | 207±35.2 | 213±38.3 |
| Lft. Corpus Callosum #1 (μ) | 233±59.9 | 212±34.0 | 217±42.5 | 197±38.7 | 221±41.3 |
| Rt. Hippocampus (μ) | 1397±77.0 | 1426±95.2 | 1422±64.4 | 1422±77.1 | 1472±84.4* |
| Lft. Hippocampus (μ) | 1365±86.7 | 1404±77.9 | 1434±61.8 | 1443±79.3* | 1443±106.9*<br>[15] |
| Right Dentate (μ) | 792±56.8 | 807±53.2 | 811±36.5 | 818±56.4 | 843±61.9* |
| Left Dentate (μ) | 776±53.8 | 805±49.6<br>[15] | 816±35.1 | 814±55.5<br>[15] | 809±80.7 |
| Right CA1 (μ) | 596±72.9 | 588±51.8 | 595±33.0 | 584±39.9 | 605±34.2 |
| Left CA1 (μ) | 564±30.4 | 581±37.6<br>[15] | 600±28.7** | 587±29.9<br>[15] | 593±32.5* |
| Right CA3 (μ) | 456±38.2 | 476±49.7 | 429±47.9 | 458±36.6 | 465±36.0 |
| Left CA 3 (μ) | 485±29.4 | 483±47.9 | 448±37.0* | 471±30.2 | 497±33.6 |
| Cerebellum (μ) | 4479±220.8 | 4962±236.4** | 4947±245.7** | 4881±297.8** | 4635±195.9 |
| Rt. Corpus Callosa #2 (μ) | 188±23.5 | 259±64.6** | 257±96.8* | 253±69.2** | 217±44.6 |
| Lft. Corpus Callosa #2 (μ) | 190±23.3 | 254±57.3* | 250±87.1* | 242±64.4* | 214±45.3 |

[N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

## DL 22 Female Pup Brain Morphometry

| Group<br>Target Dosage (mg/kg/day) | Group I<br>(Carrier) | Group II<br>(0.01) | Group III<br>(0.1) | Group IV<br>(1.0) | Group V<br>(30.0) |
|---|---|---|---|---|---|
| N | 16 | 16 | 15 | 16 | 16 |
| Brain Weights (g) | 1.703±0.076 | 1.705±0.158 | 1.745±0.091 | 1.764±0.056 | 1.746±0.078 |
| Ant/Post Cerebrum (mm) | 14.0±0.3 | 14.2±0.3 | 14.3±0.3 | 14.3±0.3 | 14.1±0.3 |
| Ant/Post Cerebellum (mm) | 6.9±0.3 | 7.1±0.2 | 6.9±0.3 | 7.0±0.2 | 6.9±0.7 |
| Right Frontal Cortex (μ) | 1877±91.6 | 1818±71.5 | 1811±89.7 | 1824±76.4 | 1883±103.3 |
| Left Frontal Cortex (μ) | 1848±91.1 | 1794±67.0 | 1797±78.5 | 1845±98.1<br>[15] | 1841±114.5 |
| Right Parietal Cortex (μ) | 1854±79.6 | 1805±77.0 | 1827±83.1 | 1824±78.4 | 1872±95.2 |
| Left Parietal Cortex (μ) | 1833±97.9 | 1796±79.3 | 1821±55.1 | 1821±94.3 | 1824±98.0 |
| Right Striatum (μ) | 2991±135.4 | 2685±120.8** | 2749±141.1** | 2790±136.8** | 3099±106.6 |
| Left Striatum (μ) | 2985±154.0 | 2661±89.3** | 2733±127.6** | 2784±139.1** | 3009±81.7 |
| Rt. Corpus Callosum (μ) | 218±39.0 | 185±29.7 | 232±35.6 | 217±30.4 | 242±50.7<br>[13] |
| Lft. Corpus Callosum (μ) | 220±45.5 | 179±28.8* | 236±35.0 | 217±33.4 | 256±53.1<br>[13] |
| Rt. Hippocampus (μ) | 1403±97.2 | 1370±80.5 | 1354±58.6 | 1410±65.7<br>[15] | 1415±75.1 |
| Lft. Hippocampus (μ) | 1398±102.4<br>[15] | 1371±69.6<br>[15] | 1379±93.8 | 1438±61.6 | 1400±108.3<br>[15] |
| Right Dentate (μ) | 803±50.3 | 792±51.2 | 778±37.2 | 798±45.1 | 816±44.7 |
| Left Dentate (μ) | 782±69.5 | 790±42.0<br>[15] | 795±64.7 | 824±36.9 | 811±56.1<br>[15] |
| Right CA1 (μ) | 597±47.9 | 585±33.8 | 578±36.8 | 586±31.6 | 590±37.1 |
| Left CA1 (μ) | 613±41.4<br>[15] | 570±35.7**<br>[15] | 578±32.0* | 588±36.1 | 592±44.1<br>[15] |
| Right CA3 (μ) | 464±45.3 | 437±41.3 | 414±27.9** | 453±33.8 | 461±35.3 |
| Left CA 3 (μ) | 483±67.8 | 450±45.8<br>[15] | 429±44.3* | 454±29.7 | 498±54.0<br>[15] |
| Cerebellum (μ) | 4692±257.3 | 4962±211.7** | 4842±255.8 | 5028±154.3** | 4746±187.0 |
| Rt. Corpus Callosa #2 (μ) | 193±26.3 | 216±50.4 | 279±100.7** | 226±34.2 | 208±26.2 |
| Lft. Corpus Callosa #2 (μ) | 193±29.4 | 216±52.4 | 272±92.6** | 226±37.1 | 211±21.0 |

[N] = Number of values averaged.
* Significantly different from carrier group, $p \leq 0.05$
** Significantly different from carrier group, $p \leq 0.01$

## IV. Summary of Results

Summary of significant treatment-related effects that were exposure dependent were as follows:

**DAMS**

| Parameter | DG 21 | DL 10 | DL 22 |
|---|---|---|---|
| Thyroid Weight | 30.0 MKD | 30.0 MKD | 30.0 MKD |
| Thyroid Histopathology | | | |
| ↓ Colloid | 30.0 MKD | ≥1.0 MKD | 30.0 MKD |
| ↑ Hypertrophy | 30.0 MKD | 30.0 MKD | 30.0 MKD |
| ↑ Hyperplasia | N. S. | 30.0 MKD | ≥0.1 MKD |
| Thyroid Hormones | | | |
| ↑ TSH | ≥0.01 MKD | ≥0.01 MKD | ≥0.1 MKD |
| ↓ $T_3$ | 30.0 MKD | N. S. | N. S. |
| ↓ $T_4$ | ≥0.01 MKD | 30.0 MKD | 30.0 MKD |

MKD = mg/kg/day
N. S. = Not Significant
↑= increased
↓= decreased

**Male Fetuses/Pups**

| Parameter | DG 21 | DL 5 | DL 10 | DL 22 |
|---|---|---|---|---|
| Thyroid Weight | N .E. | 30 MKD | ≥0.01 MKD | ≥1.0 MKD |
| Thyroid Histopathology | | | | |
| ↓ Colloid | ≥1.0 MKD | ≥1.0 MKD | 30.0 MKD | 30.0 MKD |
| Thyroid Hormones Pooled by Litter | | | | |
| ↑ TSH | ≥1.0 MKD | 1.0 MKD | 30 MKD | ≥0.01 MKD |
| ↓ $T_3$ | ≥0.01 MKD | ≥1.0 MKD | ≥1.0 MKD | ≥1.0 MKD |
| ↓ $T_4$ | 30.0 MKD | ≥0.01 MKD | N. S. | ≥0.01 MKD |
| Brain Morphometry | | | | |
| ↑ Left CA3 | N .E. | N. E. | 30.0 MKD | N. S. |
| ↑ Right Frontal Cortex | N. E. | N .E. | N. S. | 30.0 MKD |
| ↑ Left Frontal Cortex | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑ Right Parietal Cortex | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑ Left Parietal Cortex | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑Right Striatum | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑ Right Hippocampus | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑ Left Hippocampus | N. E. | N. E. | N. S. | ≥1.0 MKD |
| ↑ Right Dentate | N. E. | N. E. | N. S. | 30.0 MKD |
| ↑ Left CA1 | N. E. | N. E. | N. S. | 30.0 MKD |

N. S. = Not Significant
N. E. = Not Examined
MKD = mg/kg/day
↑= increased
↓= decreased

**Female Fetuses/Pups**

| Parameter | DG 21 | DL 5 | DL 10 | DL 22 |
|---|---|---|---|---|
| Thyroid Weight | N. E. | N. S | 30.0 MKD | ≥1.0 MKD |
| Thyroid Histopathology | | | | |
| ↓ Colloid | ≥1.0 MKD | ≥1.0 MKD | ≥1.0 MKD | 30.0 MKD |
| Thyroid Hormones Pooled by Litter | | | | |
| ↑ TSH | ≥1.0 MKD | 1.0 MKD | 30.0 MKD | ≥0.1 MKD |
| ↓ $T_3$ | ≥0.01 MKD | ≥1.0 MKD | ≥1.0 MKD | 30.0 MKD |
| ↓ $T_4$ | 30.0 MKD | ≥0.01 MKD | N. S. | N. S. |

N. S. = Not Significant
N. E. = Not Examined
MKD = mg/kg/day
↑= increased
↓= decreased

**REFERENCES**:


1. U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines*. OPPTS 870.3700: Prenatal developmental toxicity study. August, 1998.

2. U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines*. OPPTS 870.3800: Reproduction and fertility effects. August, 1998.

3. U.S. Environmental Protection Agency. Toxic Substances Control Act (TSCA); Good Laboratory Practice Standards; Final Rule. 40 CFR Part 792.

4. Christian, M.S. and Voytek, P.E. (1982). *In Vivo Reproductive and Mutagenicity Tests*. Environmental Protection Agency, Washington, D.C. National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

5. Christian, M.S. (1984). Reproductive toxicity and teratology evaluations of naltrexone (Proceedings of Naltrexone Symposium, New York Academy of Sciences, November 7, 1983), J. Clin. Psychiat. 45(9):7-10.

6. Lang, P.L. (1988). *Embryo and Fetal Developmental Toxicity (Teratology) Control Data in the Charles River Crl:CD7BR Rat*. Charles River Laboratories, Inc., Wilmington, MA 01887-0630. (Data base provided by Argus Research Laboratories, Inc.)

7. Institute of Laboratory Animal Resources (1996). *Guide for the Care and Use of Laboratory Animals*. National Academy Press, Washington, D.C.

8. Siglin, J.C. (1998). A 90-day drinking water toxicity study in rats with ammonium perchlorate (Final Report, Study No. 3455.1). Springborn Laboratories, Inc., Health and Environmental Science, Spencerville, Ohio.

9. Snedecor, G.W. and Cochran, W.G. (1967). Variance test for homogeneity of the binomial distribution. *Statistical Methods*, 6th Edition, Iowa State University Press, Ames, pp. 240-241.

10. Sokal, R.R. and Rohlf, F.J. (1969). Bartlett's test of homogeneity of variances. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 370-371.

11. Snedecor, G.W. and Cochran, W.G. (1967). Analysis of Variance. *Statistical Methods*, 6th Edition, Iowa State University Press, Ames, pp. 258-275.

12. Dunnett, C.W. (1955). A multiple comparison procedure for comparing several treatments with a control. J. Amer. Stat. Assoc. 50:1096-1121.

13. Sokal, R.R. and Rohlf, F.J. (1969). Kruskal-Wallis Test. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 388-389.

14. Siegel, S. (1956). *Nonparametric Statistics for the Behavioral Sciences*, McGraw-Hill, New York, pp. 96-104.

15. Dunn, O.J. (1964). Multiple comparisons using rank sums. Technometrics 6(3):241-252.

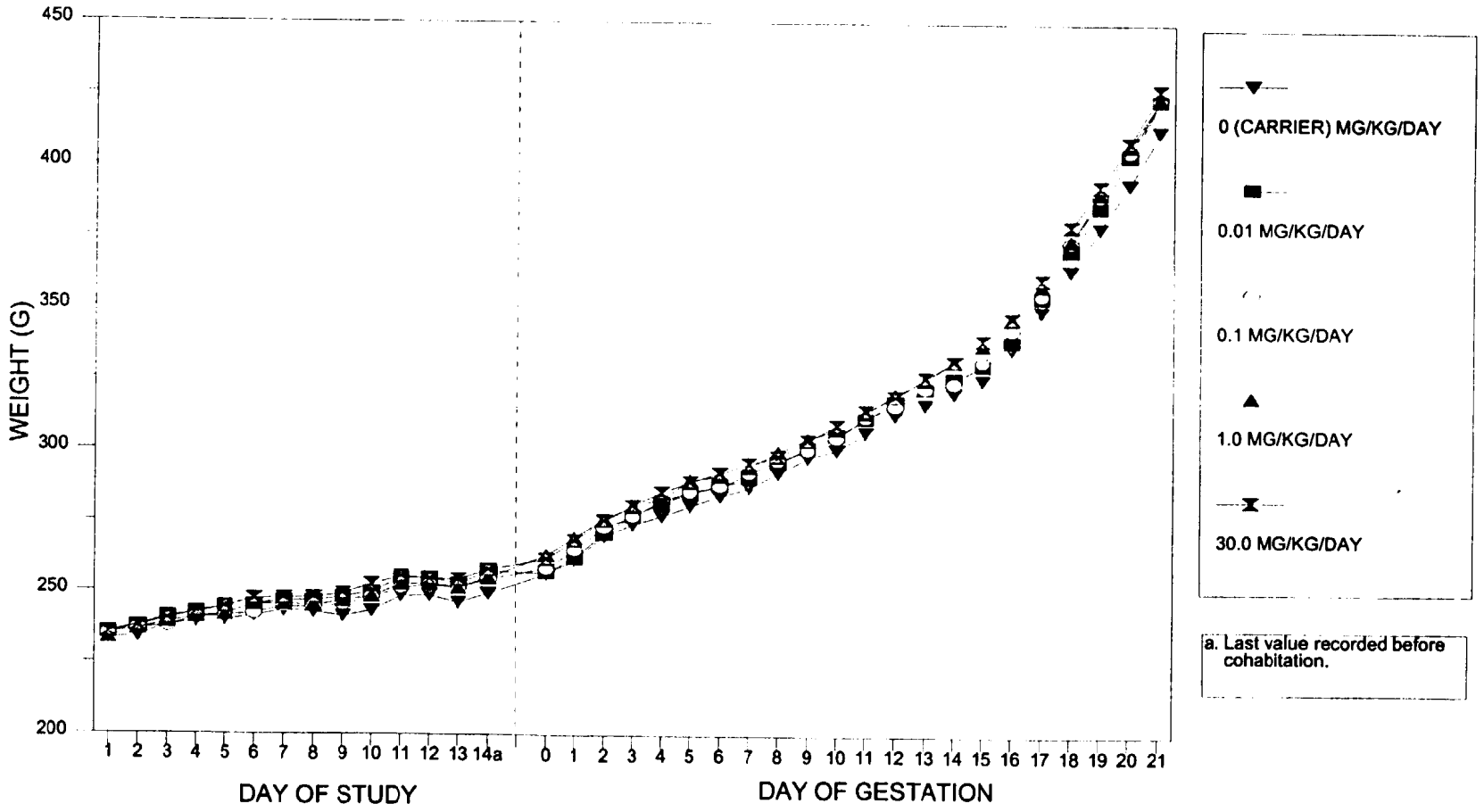
# APPENDIX A

# REPORT FIGURES

# BODY WEIGHTS

## PART A

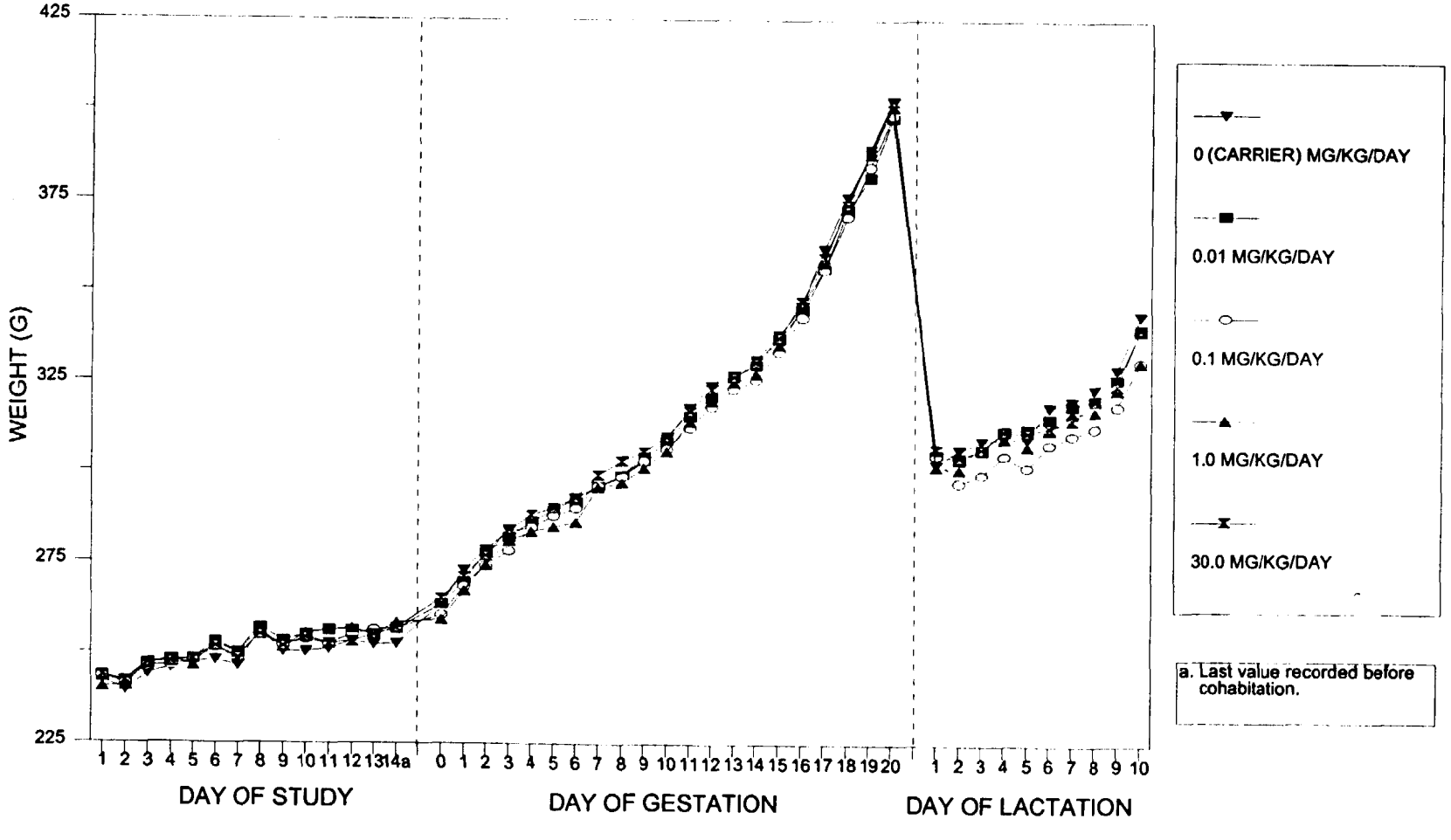
Figure 1



# BODY WEIGHTS

## PART B

Figure 2

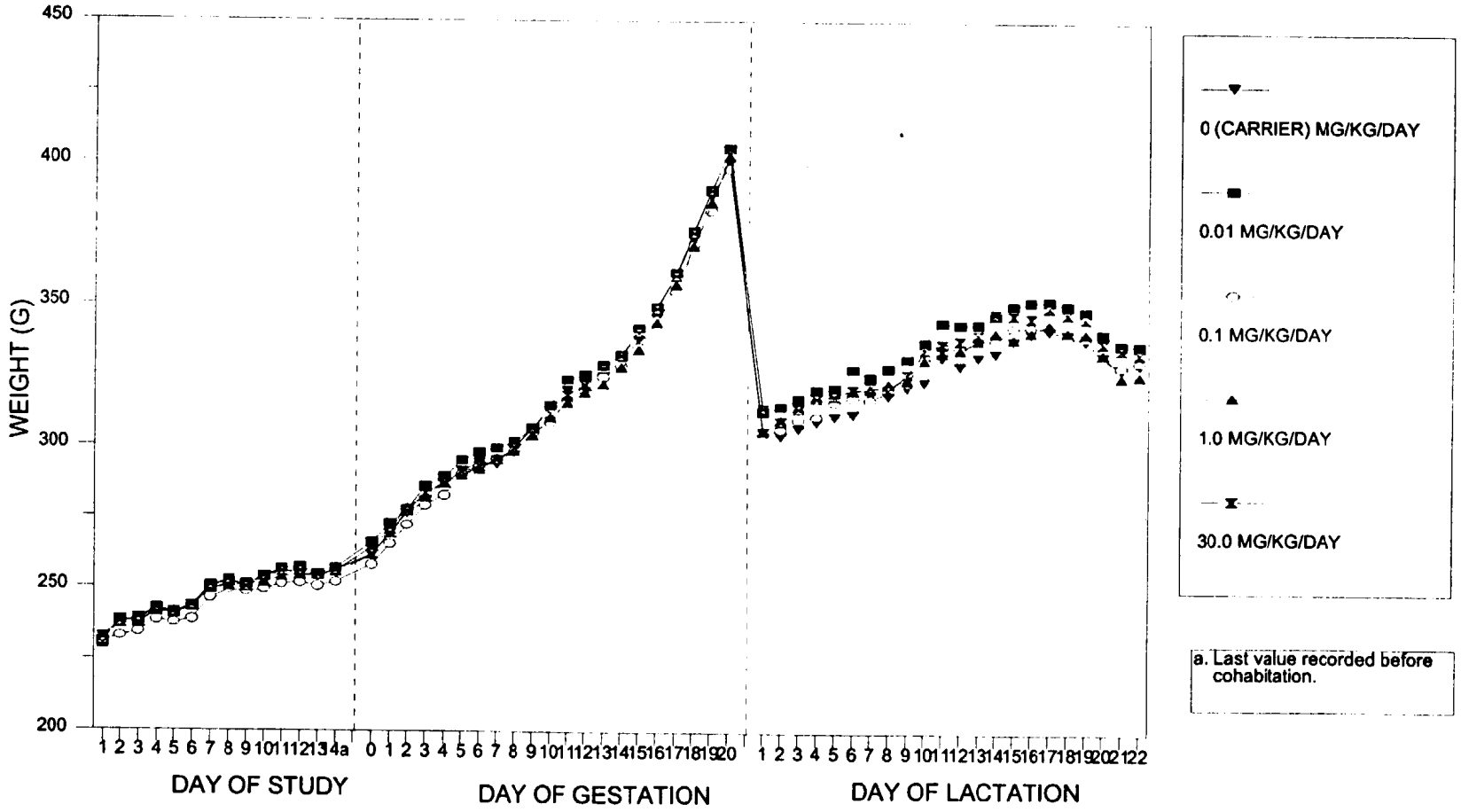



a. Last value recorded before cohabitation.

# BODY WEIGHTS

## PART C

### Figure 3




a. Last value recorded before cohabitation.

# APPENDIX B

## REPORT TABLES - PART A

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B1 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.08 ± 0.01 | 0.82 ± 0.15 | 25.33 ± 4.72 |
| | | | | | [ 22]a | [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.08 ± 0.01 | 0.75 ± 0.08 | 23.37 ± 2.79 |
| | | | [ 22]a | | [ 20]a | [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.08 ± 0.01 | 0.77 ± 0.08 | 23.93 ± 2.62 |
| | | | [ 22]a | | [ 20]a | [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B2 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - GESTATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.09 ± 0.02 [ 15]a | 0.94 ± 0.12 [ 15]a | 29.18 ± 4.71 |
| DAYS 6 - 9 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.10 ± 0.01 [ 15]a | 0.90 ± 0.14 [ 14]a | 27.41 ± 4.13 |
| DAYS 9 - 12 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.10 ± 0.01 [ 14]a | 0.97 ± 0.15 [ 13]a | 29.29 ± 3.78 [ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.10 ± 0.01 [ 11]a | 0.97 ± 0.14 [ 12]a | 28.54 ± 3.96 [ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 0.00 ± 0.00 [ 15]a | 0.01 ± 0.00 [ 14]a | 0.10 ± 0.02 [ 14]a | 1.02 ± 0.17 [ 12]a | 29.06 ± 2.97 [ 15]a |
| DAYS 18 - 21 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.09 ± 0.02 [ 15]a | 0.92 ± 0.20 | 24.65 ± 4.34 |
| DAYS 0 - 21 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.10 ± 0.01 [ 15]a | 0.98 ± 0.13 | 28.73 ± 3.61 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B3 (PAGE 1): CLINICAL OBSERVATIONS - SUMMARY - PART A

| DOSAGE GROUP | I | II | III | IV | V |
|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| PRECOHABITATION (DAY 1 OF STUDY TO THE DAY OF COHABITATION): | | | | | |
| MAXIMUM POSSIBLE INCIDENCE | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 |
| MORTALITY | 0 | 0 | 0 | 0 | 0 |
| RIGHT FOREPAW: SWOLLEN | 0/ 0 | 0/ 0 | 5/ 1 | 0/ 0 | 0/ 0 |
| INCISORS: MISSING/BROKEN | 6/ 1 | 0/ 0 | 4/ 1 | 0/ 0 | 0/ 0 |
| CHROMORHINORRHEA | 3/ 1 | 0/ 0 | 2/ 1 | 0/ 0 | 0/ 0 |
| LEFT EAR: TORN | 0/ 0 | 10/ 1 | 0/ 0 | 0/ 0 | 0/ 0 |
| LOCALIZED ALOPECIA: LIMBS | 14/ 2 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| CHROMODACRYORRHEA | 5/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| SNOUT: SWOLLEN | 4/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| RED PERIORAL SUBSTANCE | 1/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH THE OBSERVATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B3 (PAGE 2): CLINICAL OBSERVATIONS - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|
| PRESUMED GESTATION: a | | | | | |
| MAXIMUM POSSIBLE INCIDENCE b | 440/ 20 | 505/ 23 | 462/ 21 | 506/ 23 | 506/ 23 |
| MORTALITY | 0 | 0 | 0 | 0 | 0 |
| CHROMODACRYORRHEA | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 18/ 1 |
| INCISORS: MISALIGNED | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 18/ 1 |
| SNOUT: SWOLLEN | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 1/ 1 |
| LOCALIZED ALOPECIA: TOTAL | 22/ 1 | 10/ 1 | 29/ 2 | 41/ 2 | 0/ 0 |
| LIMBS | 22/ 1 | 10/ 1 | 29/ 2 | 41/ 2 | 0/ 0 |
| UNDERSIDE | 15/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| INCISORS: MISSING/BROKEN | 22/ 1 | 0/ 0 | 0/ 0 | 3/ 1 | 0/ 0 |
| HEAD TILT | 0/ 0 | 0/ 0 | 5/ 1 | 0/ 0 | 0/ 0 |
| LEFT EAR: TORN | 0/ 0 | 22/ 1 | 0/ 0 | 0/ 0 | 0/ 0 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH THE OBSERVATION
a. Restricted to rats with a confirmed mating date.
b. Includes all rats, regardless of pregnancy status and selection.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B4 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EXAMINED a | N | 16 | 16 | 16 | 16 | 16 |
| MORTALITY | N | 0 | 0 | 0 | 0 | 0 |
| APPEARED NORMAL | N | 16 | 15 | 15 | 16 | 16 |
| RIGHT EAR: TORN | N | 0 | 1 | 0 | 0 | 0 |
| KIDNEYS: BILATERAL CORTEX, NUMEROUS CLEAR FLUID FILLED CYSTS | N | 0 | 0 | 1 | 0 | 0 |

a. Refer to the individual clinical observations table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B5 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHT (G) | | | | | | |
| DAY 1 | MEAN±S.D | 233.2 ± 13.0 | 235.1 ± 13.2 | 234.8 ± 14.4 | 233.5 ± 12.8 | 235.3 ± 12.4 |
| DAY 2 | MEAN±S.D | 233.8 ± 13.8 | 237.3 ± 12.8 | 236.5 ± 13.7 | 236.3 ± 16.0 | 237.6 ± 13.1 |
| DAY 3 | MEAN±S.D | 238.0 ± 14.7 | 240.9 ± 13.2 | 237.6 ± 15.0 | 238.9 ± 14.8 | 240.0 ± 17.1 |
| DAY 4 | MEAN±S.D | 239.0 ± 14.0 | 242.0 ± 14.7 | 240.4 ± 12.8 | 240.6 ± 14.6 | 242.6 ± 15.8 |
| DAY 5 | MEAN±S.D | 239.6 ± 13.3 | 244.6 ± 13.2 | 241.0 ± 13.6 | 241.6 ± 15.1 | 244.3 ± 17.1 |
| DAY 6 | MEAN±S.D | 241.3 ± 15.0 | 245.1 ± 14.2 | 242.3 ± 13.6 | 245.1 ± 15.1 | 247.3 ± 16.9 |
| DAY 7 | MEAN±S.D | 243.1 ± 13.8 | 246.6 ± 14.6 | 244.1 ± 14.7 | 245.4 ± 16.7 | 247.5 ± 15.9 |
| DAY 8 | MEAN±S.D | 242.7 ± 14.0 | 246.5 ± 16.2 | 244.2 ± 13.3 | 244.8 ± 17.1 | 247.7 ± 18.0 |
| DAY 9 | MEAN±S.D | 241.1 ± 13.0 | 247.9 ± 15.5 | 244.9 ± 13.7 | 246.5 ± 15.2 | 249.1 ± 16.9 |
| DAY 10 | MEAN±S.D | 243.1 ± 14.4 | 249.7 ± 15.9 | 247.6 ± 14.3 | 248.0 ± 17.6 | 252.3 ± 18.4 |
| DAY 11 | MEAN±S.D | 248.3 ± 14.6 | 254.5 ± 16.4 | 251.0 ± 14.6 | 252.3 ± 18.6 | 255.3 ± 18.9 |
| DAY 12 | MEAN±S.D | 248.5 ± 14.5 | 254.7 ± 18.6 | 252.2 ± 14.9 | 252.8 ± 19.3 | 254.4 ± 18.3 |
| DAY 13 | MEAN±S.D | 246.0 ± 14.3 | 252.5 ± 16.2 | 251.3 ± 15.3 | 251.3 ± 17.4 | 254.2 ± 18.2 |
| DAY 14a | MEAN±S.D | 249.3 ± 15.2 | 257.0 ± 17.1 | 254.4 ± 14.8 | 254.8 ± 18.5 | 257.7 ± 19.4 |

DAY = DAY OF STUDY
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B6 (PAGE 1): BODY WEIGHT CHANGES - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | +9.9 ± 5.8 | +11.5 ± 6.7 | +9.3 ± 10.6 | +11.9 ± 7.2 | +12.2 ± 8.6 |
| DAYS 7 - 14a | MEAN±S.D. | +6.2 ± 6.8 | +10.5 ± 5.8 | +10.3 ± 5.5 | +9.4 ± 7.0 | +10.2 ± 8.5 |
| DAYS 1 - 14a | MEAN±S.D. | +16.1 ± 9.7 | +22.0 ± 9.3 | +19.6 ± 11.2 | +21.3 ± 9.1 | +22.4 ± 10.7 |

DAYS = DAYS OF STUDY
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B7 (PAGE 1): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 0 | MEAN±S.D. | 256.1 ± 18.9 | 256.4 ± 21.8 | 258.1 ± 18.2 | 262.8 ± 23.3 | 261.4 ± 20.6 |
| DAY 1 | MEAN±S.D. | 261.1 ± 18.1 | 261.9 ± 21.6 | 264.6 ± 17.9 | 269.0 ± 23.6 | 268.1 ± 21.4 |
| DAY 2 | MEAN±S.D. | 269.6 ± 19.1 | 270.4 ± 24.2 | 272.6 ± 19.5 | 275.4 ± 24.3 | 275.1 ± 21.4 |
| DAY 3 | MEAN±S.D. | 273.6 ± 18.5 | 276.9 ± 22.9 | 276.4 ± 20.1 | 280.2 ± 24.9 | 280.4 ± 22.6 |
| DAY 4 | MEAN±S.D. | 276.8 ± 19.3 | 281.6 ± 21.8 | 282.2 ± 20.3 | 282.8 ± 23.7 | 285.3 ± 22.8 |
| DAY 5 | MEAN±S.D. | 280.5 ± 18.4 | 285.1 ± 24.1 | 285.5 ± 19.8 | 289.6 ± 24.4 | 288.9 ± 22.5 |
| DAY 6 | MEAN±S.D. | 284.1 ± 18.2 | 287.5 ± 24.4 | 287.2 ± 20.7 | 291.0 ± 26.0 | 292.0 ± 22.2 |
| DAY 7 | MEAN±S.D. | 287.0 ± 19.5 | 290.3 ± 24.0 | 292.1 ± 20.1 | 294.2 ± 24.6 | 295.4 ± 23.0 |
| DAY 8 | MEAN±S.D. | 292.2 ± 20.8 | 295.8 ± 24.6 | 296.6 ± 21.6 | 299.6 ± 26.8 | 298.0 ± 21.8 |
| DAY 9 | MEAN±S.D. | 297.5 ± 20.3 | 301.1 ± 26.4 | 300.3 ± 20.4 | 304.2 ± 25.8 | 303.6 ± 23.2 |
| DAY 10 | MEAN±S.D. | 300.3 ± 20.3 | 305.6 ± 24.7 | 304.6 ± 21.6 | 307.5 ± 26.7 | 308.9 ± 24.5 |
| DAY 11 | MEAN±S.D. | 306.4 ± 19.6 | 311.0 ± 24.2 | 311.8 ± 21.8 | 313.1 ± 26.2 | 314.0 ± 23.9 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B7 (PAGE 2): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 12 | MEAN±S.D. | 312.5 ± 20.1 | 317.2 ± 27.7 | 315.6 ± 21.7 | 319.8 ± 27.6 | 319.0 ± 24.1 |
| DAY 13 | MEAN±S.D. | 316.1 ± 21.6 | 321.5 ± 27.1 | 321.5 ± 23.2 | 324.9 ± 29.2 | 325.7 ± 24.4 |
| DAY 14 | MEAN±S.D. | 320.2 ± 21.2 | 325.4 ± 26.2 | 323.7 ± 21.4 | 331.4 ± 28.9 | 331.4 ± 25.7 |
| DAY 15 | MEAN±S.D. | 324.7 ± 19.7 | 329.8 ± 23.5 | 331.2 ± 20.7 | 337.0 ± 28.8 | 338.8 ± 25.4 |
| DAY 16 | MEAN±S.D. | 335.8 ± 19.7 | 338.1 ± 25.3 | 342.1 ± 22.4 | 346.4 ± 29.0 | 346.6 ± 28.8 |
| DAY 17 | MEAN±S.D. | 348.9 ± 20.7 | 353.6 ± 27.0 | 354.9 ± 22.1 | 358.2 ± 29.7 | 360.3 ± 27.2 |
| DAY 18 | MEAN±S.D. | 363.4 ± 22.0 | 370.7 ± 26.2 | 373.2 ± 21.9 | 374.2 ± 31.6 | 379.0 ± 27.7 |
| DAY 19 | MEAN±S.D. | 378.5 ± 21.7 | 385.9 ± 26.0 | 389.7 ± 22.7 | 390.8 ± 32.0 | 393.1 ± 31.8 |
| DAY 20 | MEAN±S.D. | 393.9 ± 21.5 | 403.6 ± 27.4 | 405.4 ± 23.7 | 407.6 ± 31.0 | 408.6 ± 32.3 |
| DAY 21 | MEAN±S.D. | 412.5 ± 21.1 | 423.2 ± 29.6 | 423.8 ± 22.3 | 424.0 ± 36.5 | 427.0 ± 33.0 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B8 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - GESTATION - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | +28.1 ± 10.4 | +31.1 ± 8.2 | +29.2 ± 7.3 | +28.2 ± 10.0 | +30.6 ± 6.1 |
| DAYS 6 - 9 | MEAN±S.D. | +13.4 ± 4.4 | +13.6 ± 4.4 | +13.1 ± 5.3 | +13.2 ± 4.6 | +11.6 ± 3.2 |
| DAYS 9 - 12 | MEAN±S.D. | +15.0 ± 3.9 | +16.2 ± 5.8 | +15.3 ± 5.1 | +15.6 ± 3.8 | +15.4 ± 4.3 |
| DAYS 12 - 15 | MEAN±S.D. | +12.2 ± 5.2 | +12.5 ± 6.2 | +15.6 ± 6.5 | +17.2 ± 6.1* | +19.8 ± 4.5** |
| DAYS 15 - 18 | MEAN±S.D. | +38.8 ± 5.7 | +40.9 ± 5.8 | +41.9 ± 6.6 | +37.2 ± 6.0 | +40.2 ± 6.7 |
| DAYS 18 - 21 | MEAN±S.D. | +49.1 ± 6.7 | +52.5 ± 7.0 | +50.6 ± 9.5 | +49.8 ± 8.8 | +48.0 ± 11.4 |
| DAYS 0 - 21 | MEAN±S.D. | +156.4± 16.3 | +166.8± 12.0 | +165.7± 14.7 | +161.2± 18.8 | +165.6± 15.3 |

DAYS = DAYS OF GESTATION
* Significantly different from the carrier group value ($p \leq 0.05$).
** Significantly different from the carrier group value ($p \leq 0.01$).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B9 (PAGE 1): ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 29.0 ± 5.5 | 29.3 ± 6.1 | 31.0 ± 4.7 | 30.1 ± 6.2 [ 22]a | 31.1 ± 6.8 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 28.0 ± 4.9 | 29.2 ± 5.8 [ 22]a | 29.9 ± 4.4 | 28.4 ± 3.7 [ 20]a | 29.6 ± 3.9 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 28.5 ± 4.8 | 28.9 ± 5.3 [ 22]a | 30.4 ± 4.4 | 28.5 ± 3.7 [ 20]a | 29.8 ± 3.8 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED.
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B10 (PAGE 1): RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 121.7 ± 21.3 | 121.3 ± 23.8 | 129.4 ± 19.8 | 125.1 ± 23.3 [ 22]a | 128.4 ± 23.9 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 114.6 ± 21.1 | 116.6 ± 24.1 [ 22]a | 120.5 ± 17.9 | 114.7 ± 12.5 [ 20]a | 118.5 ± 14.1 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 117.8 ± 19.6 | 117.5 ± 21.6 [ 22]a | 124.5 ± 17.9 | 117.0 ± 12.5 [ 20]a | 121.3 ± 13.3 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED.
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B11 (PAGE 1): MATERNAL ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 39.4 ± 8.2 | 38.5 ± 7.1 [ 15]a | 41.2 ± 6.3 [ 15]a | 40.4 ± 5.9 [ 15]a | 42.1 ± 7.7 |
| DAYS 6 - 9 | MEAN±S.D. | 40.8 ± 6.7 | 39.4 ± 8.4 [ 15]a | 46.6 ± 6.6 [ 15]a | 41.8 ± 6.9 [ 14]a | 42.6 ± 6.8 |
| DAYS 9 - 12 | MEAN±S.D. | 45.2 ± 8.1 | 44.3 ± 9.7 [ 15]a | 50.2 ± 8.1 [ 14]a | 47.8 ± 8.5 [ 13]a | 47.6 ± 6.5 [ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 46.6 ± 9.0 | 45.0 ± 9.6 [ 15]a | 50.0 ± 8.2 [ 11]a | 47.2 ± 7.7 [ 12]a | 47.8 ± 6.6 [ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 47.8 ± 7.3 [ 15]a | 48.2 ± 7.5 [ 14]a | 56.1 ± 7.9** [ 14]a | 50.8 ± 8.4 [ 12]a | 52.1 ± 6.9 [ 15]a |
| DAYS 18 - 21 | MEAN±S.D. | 44.7 ± 9.1 | 46.0 ± 6.6 [ 15]a | 52.6 ± 9.5 [ 15]a | 49.0 ± 11.3 | 45.8 ± 8.9 |
| DAYS 0 - 21 | MEAN±S.D. | 43.5 ± 7.1 | 42.9 ± 7.2 [ 15]a | 48.2 ± 6.1 [ 15]a | 46.4 ± 7.1 | 45.9 ± 6.3 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
** Significantly different from the carrier group value ($p \leq 0.01$).

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TABLE B12 (PAGE 1): MATERNAL RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 145.6 ± 33.4 | 140.6 ± 26.2 [ 15]a | 149.9 ± 24.0 [ 15]a | 145.6 ± 18.5 [ 15]a | 151.0 ± 24.4 |
| DAYS 6 - 9 | MEAN±S.D. | 140.8 ± 22.8 | 133.7 ± 25.1 [ 15]a | 158.7 ± 22.3 [ 15]a | 141.3 ± 21.9 [ 14]a | 143.3 ± 21.6 |
| DAYS 9 - 12 | MEAN±S.D. | 149.1 ± 29.5 | 143.0 ± 27.9 [ 15]a | 162.1 ± 23.8 [ 14]a | 153.8 ± 24.0 [ 13]a | 153.6 ± 19.8 [ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 146.6 ± 27.2 | 138.6 ± 25.5 [ 15]a | 153.8 ± 22.8 [ 11]a | 145.7 ± 21.4 [ 12]a | 146.1 ± 20.3 [ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 140.1 ± 24.3 [ 15]a | 139.2 ± 20.7 [ 14]a | 160.9 ± 24.9 [ 14]a | 145.4 ± 24.9 [ 12]a | 145.5 ± 14.8 [ 15]a |
| DAYS 18 - 21 | MEAN±S.D. | 115.9 ± 24.0 | 116.7 ± 17.6 [ 15]a | 132.1 ± 23.2 [ 15]a | 122.8 ± 26.4 | 113.6 ± 20.0 |
| DAYS 0 - 21 | MEAN±S.D. | 139.2 ± 24.1 | 134.9 ± 21.1 [ 15]a | 151.3 ± 18.8 [ 15]a | 144.4 ± 19.5 | 142.4 ± 17.9 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.

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TABLE B13 (PAGE 1): ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 18.0 ± 2.1 | 19.2 ± 2.2 | 18.4 ± 2.1 | 19.0 ± 2.8 [ 22]a | 19.6 ± 2.7 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 17.1 ± 1.7 | 18.4 ± 2.6 | 17.9 ± 1.7 | 18.1 ± 1.8 | 18.4 ± 2.1 |
| DAYS 1 - 14b | MEAN±S.D. | 17.5 ± 1.6 | 18.8 ± 2.1 | 18.1 ± 1.8 | 20.6 ± 10.1 | 18.9 ± 2.2 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED.
a. Excludes values that were associated with spillage.
b. Last value recorded before cohabitation.

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TABLE B14 (PAGE 1): RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 75.6 ± 7.6 | 79.4 ± 9.1 | 76.7 ± 8.3 | 79.1 ± 9.9 [ 22]a | 80.3 ± 8.2 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 69.6 ± 5.6 | 73.3 ± 8.2 | 72.0 ± 5.5 | 72.7 ± 3.7 | 73.0 ± 4.6 |
| DAYS 1 - 14b | MEAN±S.D. | 72.3 ± 5.2 | 76.1 ± 7.2 | 74.2 ± 6.5 | 83.7 ± 39.3 | 76.2 ± 5.5 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED.
a. Excludes values that were associated with spillage.
b. Last value recorded before cohabitation.

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TABLE B15 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 21.7 ± 2.3 | 22.8 ± 3.4 | 22.2 ± 2.2 | 23.0 ± 2.2 | 22.9 ± 2.0 |
| DAYS 6 - 9 | MEAN±S.D. | 23.5 ± 2.6 | 24.4 ± 3.8 | 23.8 ± 2.8 | 24.4 ± 2.7 | 23.7 ± 2.1<br>[ 15]a |
| DAYS 9 - 12 | MEAN±S.D. | 24.3 ± 2.6 | 25.8 ± 3.9 | 25.1 ± 2.8 | 25.6 ± 2.8 | 25.0 ± 2.2 |
| DAYS 12 - 15 | MEAN±S.D. | 23.4 ± 2.1 | 24.5 ± 2.6 | 24.1 ± 2.9 | 24.7 ± 3.0 | 24.6 ± 2.3 |
| DAYS 15 - 18 | MEAN±S.D. | 23.8 ± 1.2 | 25.1 ± 2.1 | 25.4 ± 2.5 | 26.0 ± 3.3 | 25.8 ± 2.6 |
| DAYS 18 - 21 | MEAN±S.D. | 24.1 ± 2.6 | 25.3 ± 2.2 | 24.8 ± 2.6 | 24.4 ± 2.0 | 23.7 ± 4.0 |
| DAYS 0 - 21 | MEAN±S.D. | 23.2 ± 1.8 | 24.4 ± 2.7 | 24.0 ± 2.2 | 24.4 ± 2.1 | 24.0 ± 1.9 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.

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TABLE B16 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - PART A

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 79.8 ± 6.8 | 83.2 ± 9.8 | 80.8 ± 5.9 | 82.5 ± 5.5 | 82.1 ± 4.9 |
| DAYS 6 - 9 | MEAN±S.D. | 80.9 ± 5.9 | 82.6 ± 7.8 | 80.8 ± 7.9 | 82.2 ± 6.6 | 79.5 ± 5.2 [ 15]a |
| DAYS 9 - 12 | MEAN±S.D. | 79.9 ± 5.4 | 83.6 ± 10.3 | 81.5 ± 7.4 | 82.3 ± 5.2 | 80.5 ± 4.6 |
| DAYS 12 - 15 | MEAN±S.D. | 73.6 ± 4.4 | 75.8 ± 5.4 | 74.7 ± 7.6 | 75.2 ± 5.1 | 74.7 ± 5.1 |
| DAYS 15 - 18 | MEAN±S.D. | 69.4 ± 4.1 | 72.2 ± 5.3 | 72.6 ± 6.2 | 73.6 ± 9.1 | 72.3 ± 4.6 |
| DAYS 18 - 21 | MEAN±S.D. | 62.3 ± 6.7 | 64.0 ± 4.9 | 62.4 ± 6.0 | 61.2 ± 4.6 | 58.8 ± 7.7 |
| DAYS 0 - 21 | MEAN±S.D. | 74.0 ± 3.7 | 76.7 ± 5.4 | 75.2 ± 5.4 | 75.9 ± 3.7 | 74.6 ± 2.6 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.

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TABLE B17 (PAGE 1): CAESAREAN-SECTIONING OBSERVATIONS - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| RATS PREGNANT AND CAESAREAN-SECTIONED ON DAY 21 OF GESTATION | N | 16 | 16 | 16 | 16 | 16 |
| CORPORA LUTEA | MEAN±S.D. | 17.8 ± 2.2 | 17.9 ± 2.6 | 19.2 ± 3.4 | 18.9 ± 2.6 | 18.5 ± 4.0 |
| IMPLANTATIONS | MEAN±S.D. | 15.3 ± 1.3 | 15.9 ± 1.3 | 16.6 ± 1.9 | 16.1 ± 1.9 | 16.1 ± 2.3 |
| LITTER SIZES | MEAN±S.D. | 14.8 ± 1.6 | 15.2 ± 1.5 | 15.9 ± 1.4 | 15.7 ± 1.7 | 15.4 ± 1.9 |
| LIVE FETUSES | N | 237 | 244 | 254 | 251 | 247 |
| | MEAN±S.D. | 14.8 ± 1.6 | 15.2 ± 1.5 | 15.9 ± 1.4 | 15.7 ± 1.7 | 15.4 ± 1.9 |
| DEAD FETUSES | N | 0 | 0 | 0 | 0 | 0 |
| RESORPTIONS | MEAN±S.D. | 0.5 ± 0.6 | 0.6 ± 0.5 | 0.8 ± 0.9 | 0.4 ± 0.7 | 0.7 ± 0.9 |
| EARLY RESORPTIONS | N | 7 | 10 | 12 | 7 | 11 |
| | MEAN±S.D. | 0.4 ± 0.5 | 0.6 ± 0.5 | 0.8 ± 0.9 | 0.4 ± 0.7 | 0.7 ± 0.9 |
| LATE RESORPTIONS | N | 1 | 0 | 0 | 0 | 0 |
| | MEAN±S.D. | 0.1 ± 0.2 | 0.0 ± 0.0 | 0.0 ± 0.0 | 0.0 ± 0.0 | 0.0 ± 0.0 |
| DAMS WITH ANY RESORPTIONS | N(%) | 7( 43.8) | 10( 62.5) | 8( 50.0) | 5( 31.2) | 7( 43.8) |
| DAMS WITH VIABLE FETUSES | N(%) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) |
| PLACENTAE APPEARED NORMAL | N(%) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) |

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TABLE B18 (PAGE 1): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - SUMMARY - PART A

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| LITTERS WITH ONE OR MORE LIVE FETUSES | N | 16 | 16 | 16 | 16 | 16 |
| IMPLANTATIONS | MEAN±S.D. | 15.3 ± 1.3 | 15.9 ± 1.3 | 16.6 ± 1.9 | 16.1 ± 1.9 | 16.1 ± 2.3 |
| LIVE FETUSES | N | 237 | 244 | 254 | 251 | 247 |
| | MEAN±S.D. | 14.8 ± 1.6 | 15.2 ± 1.5 | 15.9 ± 1.4 | 15.7 ± 1.7 | 15.4 ± 1.9 |
| LIVE MALE FETUSES | N | 119 | 119 | 129 | 111 | 128 |
| % LIVE MALE FETUSES/LITTER | MEAN±S.D. | 50.4 ± 8.8 | 48.7 ± 12.7 | 50.8 ± 8.7 | 44.4 ± 13.5 | 52.0 ± 12.4 |
| LIVE FETAL BODY WEIGHTS (GRAMS)/LITTER | MEAN±S.D. | 5.09 ± 0.24 | 5.05 ± 0.25 | 4.99 ± 0.31 | 4.99 ± 0.33 | 5.06 ± 0.27 |
| MALE FETUSES | MEAN±S.D. | 5.22 ± 0.21 | 5.18 ± 0.25 | 5.10 ± 0.35 | 5.18 ± 0.39 | 5.19 ± 0.31 |
| FEMALE FETUSES | MEAN±S.D. | 4.96 ± 0.27 | 4.90 ± 0.30 | 4.87 ± 0.31 | 4.84 ± 0.32 | 4.90 ± 0.26 |
| % RESORBED CONCEPTUSES/LITTER | MEAN±S.D. | 3.3 ± 4.2 | 4.0 ± 3.2 | 4.1 ± 5.0 | 2.5 ± 4.2 | 3.9 ± 5.1 |

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TABLE B19 (PAGE 1): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16501 | | NO ADVERSE FINDINGS |
| 16502 | | NO ADVERSE FINDINGS |
| 16503 | | NO ADVERSE FINDINGS |
| 16504 | DS( 5- 17) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 0- 21) | LOCALIZED ALOPECIA: LIMBS a |
| | DG( 7- 21) | LOCALIZED ALOPECIA: UNDERSIDE a |
| 16505 | | NO ADVERSE FINDINGS |
| 16506 | DS( 9 ) | RED PERIORAL SUBSTANCE |
| | DS( 9- 11) | CHROMORHINORRHEA |
| | DS( 9- 12) | SNOUT: SWOLLEN |
| | DS( 13 ) | SWELLING RESOLVED |
| | DS( 9- 13) | CHROMODACRYORRHEA |
| | DS( 9- 17) | INCISORS: MISSING/BROKEN |
| | DS( 15 ) | INCISOR(S) GROWN IN |
| | DG( 0- 21) | INCISORS: MISSING/BROKEN a |
| 16507 | DS( 11- 19) | LOCALIZED ALOPECIA: LIMBS |
| 16508 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

a. Observation confirmed at necropsy.

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TABLE B19 (PAGE 2): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP I | 0 (CARRIER) MG/KG/DAY |
|---|---|
| RAT # | DESCRIPTION |
| 16509 | NO ADVERSE FINDINGS |
| 16510 | NO ADVERSE FINDINGS |
| 16511 | NO ADVERSE FINDINGS |
| 16512 | NO ADVERSE FINDINGS |
| 16513 | NO ADVERSE FINDINGS |
| 16514 | NO ADVERSE FINDINGS |
| 16515 | NO ADVERSE FINDINGS |
| 16516 | NO ADVERSE FINDINGS |
| 16517 | NO ADVERSE FINDINGS |
| 16518 | NO ADVERSE FINDINGS |
| 16519 | NO ADVERSE FINDINGS |
| 16520 | NO ADVERSE FINDINGS |
| 16521 | NO ADVERSE FINDINGS |
| 16522 | NO ADVERSE FINDINGS |
| 16523 | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

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TABLE B19 (PAGE 3): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP II | | 0.01 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16524 | DG( 12- 21) | LOCALIZED ALOPECIA: LIMBS a |
| 16525 | | NO ADVERSE FINDINGS |
| 16526 | | NO ADVERSE FINDINGS |
| 16527 | | NO ADVERSE FINDINGS |
| 16528 | | NO ADVERSE FINDINGS |
| 16529 | | NO ADVERSE FINDINGS |
| 16530 | | NO ADVERSE FINDINGS |
| 16531 | | NO ADVERSE FINDINGS |
| 16532 | | NO ADVERSE FINDINGS |
| 16533 | | NO ADVERSE FINDINGS |
| 16534 | | NO ADVERSE FINDINGS |
| 16535 | DS( 5- 15) | LEFT EAR: TORN |
| | DG( 0- 21) | LEFT EAR: TORN a |
| 16536 | | NO ADVERSE FINDINGS |
| 16537 | | NO ADVERSE FINDINGS |
| 16538 | | NO ADVERSE FINDINGS |
| 16539 | | NO ADVERSE FINDINGS |
| 16540 | | NO ADVERSE FINDINGS |
| 16541 | | NO ADVERSE FINDINGS |
| 16542 | | NO ADVERSE FINDINGS |
| 16543 | | NO ADVERSE FINDINGS |
| 16544 | | NO ADVERSE FINDINGS |
| 16545 | | NO ADVERSE FINDINGS |
| 16546 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION
a. Observation confirmed at necropsy.

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TABLE B19 (PAGE 4): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP III | | 0.1 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16547 | | NO ADVERSE FINDINGS |
| 16548 | | NO ADVERSE FINDINGS |
| 16549 | DS( 10- 15) | RIGHT FOREPAW: SWOLLEN |
| | DS( 16 ) | SWELLING RESOLVED |
| | DS( 16 ) | THIRD DIGIT: SWOLLEN |
| 16550 | DG( 0- 20) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 21 ) | ALOPECIA NO LONGER APPARENT |
| 16551 | | NO ADVERSE FINDINGS |
| 16552 | | NO ADVERSE FINDINGS |
| 16553 | | NO ADVERSE FINDINGS |
| 16554 | | NO ADVERSE FINDINGS |
| 16555 | DS( 6- 7) | CHROMORHINORRHEA |
| 16556 | | NO ADVERSE FINDINGS |
| 16557 | | NO ADVERSE FINDINGS |
| 16558 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

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TABLE B19 (PAGE 5): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP III | | 0.1 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16559 | | NO ADVERSE FINDINGS |
| 16560 | | NO ADVERSE FINDINGS |
| 16561 | | NO ADVERSE FINDINGS |
| 16562 | DS( 5- 8) | INCISORS: MISSING/BROKEN |
| | DS( 9 ) | INCISOR(S) GROWN IN |
| 16563 | | NO ADVERSE FINDINGS |
| 16564 | DG( 14- 21) | LOCALIZED ALOPECIA: LIMBS |
| 16565 | DG( 17- 21) | HEAD TILT |
| 16566 | | NO ADVERSE FINDINGS |
| 16567 | | NO ADVERSE FINDINGS |
| 16568 | | NO ADVERSE FINDINGS |
| 16569 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

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TABLE B19 (PAGE 6): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16570 | | NO ADVERSE FINDINGS |
| 16571 | | NO ADVERSE FINDINGS |
| 16572 | DG( 19- 21) | INCISORS: MISSING/BROKEN |
| 16573 | DG( 1- 21) | LOCALIZED ALOPECIA: LIMBS |
| 16574 | | NO ADVERSE FINDINGS |
| 16575 | DG( 2- 21) | LOCALIZED ALOPECIA: LIMBS a |
| 16576 | | NO ADVERSE FINDINGS |
| 16577 | | NO ADVERSE FINDINGS |
| 16578 | | NO ADVERSE FINDINGS |
| 16579 | | NO ADVERSE FINDINGS |
| 16580 | | NO ADVERSE FINDINGS |
| 16581 | | NO ADVERSE FINDINGS |
| 16582 | | NO ADVERSE FINDINGS |
| 16583 | | NO ADVERSE FINDINGS |
| 16584 | | NO ADVERSE FINDINGS |
| 16585 | | NO ADVERSE FINDINGS |
| 16586 | | NO ADVERSE FINDINGS |
| 16587 | | NO ADVERSE FINDINGS |
| 16588 | | NO ADVERSE FINDINGS |
| 16589 | | NO ADVERSE FINDINGS |
| 16590 | | NO ADVERSE FINDINGS |
| 16591 | | NO ADVERSE FINDINGS |
| 16592 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B19 (PAGE 7): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP V | | 30.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16593 | | NO ADVERSE FINDINGS |
| 16594 | | NO ADVERSE FINDINGS |
| 16595 | | NO ADVERSE FINDINGS |
| 16596 | | NO ADVERSE FINDINGS |
| 16597 | | NO ADVERSE FINDINGS |
| 16598 | | NO ADVERSE FINDINGS |
| 16599 | DG( 3 ) | SNOUT: SWOLLEN |
| | DG( 4 ) | SWELLING RESOLVED |
| | DG( 4- 21) | CHROMODACRYORRHEA |
| | DG( 4- 21) | INCISORS: MISALIGNED |
| 16600 | | NO ADVERSE FINDINGS |
| 16601 | | NO ADVERSE FINDINGS |
| 16602 | | NO ADVERSE FINDINGS |
| 16603 | | NO ADVERSE FINDINGS |
| 16604 | | NO ADVERSE FINDINGS |
| 16605 | | NO ADVERSE FINDINGS |
| 16606 | | NO ADVERSE FINDINGS |
| 16607 | | NO ADVERSE FINDINGS |
| 16608 | | NO ADVERSE FINDINGS |
| 16609 | | NO ADVERSE FINDINGS |
| 16610 | | NO ADVERSE FINDINGS |
| 16611 | | NO ADVERSE FINDINGS |
| 16612 | | NO ADVERSE FINDINGS |
| 16613 | | NO ADVERSE FINDINGS |
| 16614 | | NO ADVERSE FINDINGS |
| 16615 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B20 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| I | | | | | |
| 0 (CARRIER) | 16501 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16502 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16503 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16504 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16505 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16506 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16508 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16509 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16510 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16513 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16514 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16515 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16516 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16519 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16521 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16522 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |

DG = DAY OF PRESUMED GESTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B20 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| II 0.01 | 16524 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16525 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16526 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16528 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16529 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16531 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16532 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16535 | DG 21 | P | 36 | RIGHT EAR: TORN.<br>ALL OTHER TISSUES APPEARED NORMAL. |
| | 16536 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16539 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16540 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16541 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16542 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16544 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16545 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16546 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |

DG = DAY OF PRESUMED GESTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B20 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| III 0.1 | 16547 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16548 | DG 21 | P | 37 | KIDNEYS: NUMEROUS BILATERAL CORTEX, CLEAR FLUID FILLED CYSTS (PINPOINT TO 0.3 CM IN DIAMETER). ALL OTHER TISSUES APPEARED NORMAL. |
| | 16550 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16552 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16553 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16554 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16555 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16557 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16559 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16560 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16561 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16562 | DG 21 | P | 38 | ALL TISSUES APPEARED NORMAL. |
| | 16563 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16565 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16566 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16567 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |

DG = DAY OF PRESUMED GESTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B20 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| IV | | | | | |
| 1.0 | 16570 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16571 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16574 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16575 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16576 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16577 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16578 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16579 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16580 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16581 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16582 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16583 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16584 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16587 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16589 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16592 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |

DG = DAY OF PRESUMED GESTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B20 (PAGE 5): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - PART A

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| V | | | | | |
| 30.0 | 16593 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16594 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16596 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16597 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16598 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16600 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16601 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16602 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16605 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16606 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16608 | DG 21 | P | 35 | ALL TISSUES APPEARED NORMAL. |
| | 16609 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16610 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16611 | DG 21 | P | 37 | ALL TISSUES APPEARED NORMAL. |
| | 16613 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |
| | 16614 | DG 21 | P | 36 | ALL TISSUES APPEARED NORMAL. |

DG = DAY OF PRESUMED GESTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table B19) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | | | |
| 16501 | 207. | 209. | 212. | 214. | 214. | 220. | 224. | 218. | 218. | 225. | 226. | 225. | 223. | 231. | 232. | 235. |
| 16502 | 258. | 252. | 258. | 262. | 263. | 254. | 260. | 264. | 264. | 258. | 264. | 267. | 269. | 266. | 275. | 284. |
| 16503 | 229. | 236. | 238. | 243. | 236. | 243. | 245. | 244. | 240. | 248. | 255. | 254. | 244. | 253. | 258. | 262. |
| 16504 | 239. | 237. | 240. | 246. | 244. | 241. | 245. | 245. | 246. | 247. | 252. | 252. | 248. | 252. | 254. | 265. |
| 16505 | 219. | 224. | 220. | 221. | 226. | 227. | 229. | 226. | 229. | 231. | 230. | 230. | 230. | 237. | 239. | |
| 16506 | 249. | 252. | 258. | 257. | 258. | 263. | 263. | 261. | 244. | 247. | 251. | 258. | 250. | 250. | 236. | 232. |
| 16507 | 234. | 228. | 236. | 237. | 244. | 241. | 240. | 245. | 245. | 240. | 251. | 256. | 252. | 250. | 260. | 269. |
| 16508 | 241. | 243. | 245. | 239. | 244. | 251. | 245. | 246. | 249. | 249. | 252. | 250. | 248. | 255. | 255. | |
| 16509 | 212. | 210. | 211. | 213. | 215. | 214. | 215. | 217. | 217. | 217. | 217. | 222. | 218. | 218. | 222. | 228. |
| 16510 | 249. | 253. | 258. | 257. | 259. | 266. | 269. | 266. | 268. | 273. | 276. | 275. | 273. | 276. | 287. | 287. |
| 16511 | 234. | 229. | 237. | 239. | 238. | 235. | 242. | 244. | 239. | 238. | 246. | 245. | 242. | 241. | 247. | 256. |
| 16512 | 235. | 243. | 248. | 246. | 244. | 252. | 250. | 253. | 248. | 252. | 263. | 257. | 250. | 258. | 266. | 271. |
| 16513 | 216. | 214. | 217. | 224. | 225. | 220. | 226. | 226. | 225. | 225. | 231. | 235. | 232. | 233. | 240. | 246. |
| 16514 | 249. | 246. | 254. | 255. | 255. | 254. | 256. | 249. | 238. | 230. | 253. | 259. | 257. | 258. | 264. | 268. |
| 16515 | 232. | 232. | 230. | 238. | 239. | 243. | 237. | 240. | 244. | 245. | 246. | 245. | 253. | 257. | | |
| 16516 | 239. | 239. | 244. | 242. | 237. | 246. | 245. | 244. | 243. | 251. | 253. | 252. | 250. | 254. | 257. | 263. |
| 16517 | 219. | 212. | 218. | 218. | 221. | 214. | 222. | 223. | 220. | 219. | 223. | 222. | 220. | 219. | 229. | 236. |
| 16518 | 245. | 236. | 246. | 251. | 254. | 244. | 251. | 254. | 251. | 249. | 258. | 258. | 260. | 254. | 260. | 267. |
| 16519 | 230. | 238. | 242. | 234. | 240. | 245. | 242. | 233. | 243. | 248. | 247. | 240. | 241. | 251. | 246. | |
| 16520 | 238. | 242. | 245. | 244. | 240. | 244. | 247. | 245. | 244. | 247. | 252. | 247. | 246. | 251. | 257. | 257. |
| 16521 | 226. | 236. | 240. | 240. | 238. | 249. | 248. | 249. | 244. | 256. | 260. | 258. | 254. | 263. | 266. | 269. |
| 16522 | 240. | 249. | 251. | 250. | 245. | 259. | 258. | 258. | 254. | 266. | 264. | 268. | 260. | 274. | 276. | 277. |
| 16523 | 223. | 218. | 226. | 228. | 231. | 225. | 232. | 232. | 233. | 231. | 240. | 241. | 238. | 232. | 242. | 250. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 2): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
| 16501 | | | |
| 16502 | 284. | | |
| 16503 | | | |
| 16504 | 262. | | |
| 16505 | | | |
| 16506 | 225. | | |
| 16507 | 274. | 274. | 281. |
| 16508 | | | |
| 16509 | 224. | | |
| 16510 | | | |
| 16511 | 259. | 259. | 264. |
| 16512 | 264. | 269. | 281. |
| 16513 | 247. | | |
| 16514 | 270. | | |
| 16515 | | | |
| 16516 | | | |
| 16517 | 236. | | |
| 16518 | 267. | | |
| 16519 | | | |
| 16520 | | | |
| 16521 | | | |
| 16522 | | | |
| 16523 | 249. | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 3): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | | 0.01 MG/KG/DAY | | | | | | | | | | |
| 16524 | 212. | 215. | 219. | 217. | 219. | 221. | 221. | 219. | 217. | 221. | 227. | 223. | 222. | 227. | 223. | 225. |
| 16525 | 259. | 264. | 270. | 271. | 266. | 272. | 277. | 277. | 274. | 276. | 283. | 287. | 281. | 288. | 272. | 294. |
| 16526 | 212. | 221. | 227. | 232. | 234. | 229. | 237. | 238. | 236. | 233. | 242. | 244. | 243. | 237. | 234. | 250. |
| 16527 | 243. | 245. | 248. | 247. | 253. | 257. | 253. | 253. | 253. | 253. | 260. | 263. | 258. | 267. | 269. | 274. |
| 16528 | 215. | 219. | 218. | 213. | 219. | 221. | 218. | 212. | 218. | 220. | 223. | 217. | 219. | 228. | 224. | |
| 16529 | 252. | 259. | 263. | 261. | 259. | 265. | 267. | 264. | 262. | 272. | 280. | 279. | 271. | 286. | 283. | 287. |
| 16530 | 238. | 241. | 243. | 246. | 252. | 254. | 255. | 250. | 254. | 259. | 263. | 265. | 260. | 258. | 265. | 262. |
| 16531 | 234. | 240. | 246. | 246. | 243. | 252. | 254. | 253. | 249. | 259. | 260. | 261. | 256. | 265. | 270. | 271. |
| 16532 | 221. | 220. | 230. | 230. | 236. | 232. | 237. | 240. | 240. | 238. | 250. | 251. | 246. | 250. | 253. | 255. |
| 16533 | 247. | 247. | 254. | 256. | 260. | 256. | 260. | 264. | 266. | 263. | 273. | 276. | 268. | 272. | 273. | 273. |
| 16534 | 230. | 229. | 236. | 239. | 242. | 236. | 242. | 248. | 252. | 245. | 256. | 261. | 258. | 257. | 254. | 265. |
| 16535 | 236. | 240. | 247. | 244. | 246. | 238. | 250. | 252. | 255. | 253. | 250. | 260. | 260. | 263. | 262. | |
| 16536 | 222. | 227. | 228. | 226. | 232. | 231. | 230. | 223. | 228. | 233. | 232. | 228. | 232. | 238. | 241. | |
| 16537 | 247. | 248. | 251. | 255. | 260. | 254. | 261. | 260. | 260. | 259. | 266. | 267. | 264. | 263. | 272. | 278. |
| 16538 | 234. | 232. | 238. | 247. | 255. | 257. | 253. | 257. | 265. | 271. | 272. | 265. | 269. | 278. | 282. | 286. |
| 16539 | 244. | 244. | 245. | 244. | 248. | 248. | 245. | 247. | 247. | 247. | 251. | 252. | 252. | 254. | | |
| 16540 | 225. | 230. | 231. | 224. | 233. | 237. | 235. | 230. | 236. | 238. | 238. | 233. | 237. | 244. | 244. | |
| 16541 | 250. | 251. | 246. | 256. | 260. | 259. | 253. | 260. | 265. | 264. | 262. | 268. | 268. | 269. | | |
| 16542 | 230. | 234. | 236. | 237. | 235. | 243. | 240. | 239. | 238. | 245. | 253. | 248. | 248. | 257. | 256. | 256. |
| 16543 | 246. | 236. | 243. | 253. | 252. | 245. | 251. | 254. | 257. | 251. | 258. | 262. | 258. | 257. | 264. | 272. |
| 16544 | 226. | 228. | 224. | 223. | 228. | 225. | 225. | 223. | 227. | 228. | 231. | 226. | 228. | 229. | 233. | |
| 16545 | 238. | 247. | 249. | 248. | 246. | 255. | 256. | 256. | 254. | 263. | 266. | 266. | 258. | 267. | 268. | 281. |
| 16546 | 246. | 242. | 249. | 250. | 248. | 250. | 251. | 251. | 249. | 252. | 258. | 256. | 251. | 258. | 265. | 268. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 4): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP II | | 0.01 MG/KG/DAY |
| 16524 | | | |
| 16525 | | | |
| 16526 | 255. | | |
| 16527 | 283. | 284. | |
| 16528 | | | |
| 16529 | | | |
| 16530 | | | |
| 16531 | | | |
| 16532 | 255. | | |
| 16533 | 277. | | |
| 16534 | 267. | | |
| 16535 | | | |
| 16536 | | | |
| 16537 | 277. | | |
| 16538 | | | |
| 16539 | | | |
| 16540 | | | |
| 16541 | | | |
| 16542 | | | |
| 16543 | 271. | | |
| 16544 | | | |
| 16545 | | | |
| 16546 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 5): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | | 0.1 MG/KG/DAY | | | | | | | | | | |
| 16547 | 213. | 218. | 225. | 222. | 218. | 225. | 230. | 227. | 222. | 231. | 231. | 236. | 232. | 242. | 236. | 228. |
| 16548 | 262. | 264. | 275. | 271. | 266. | 272. | 278. | 275. | 273. | 278. | 281. | 282. | 277. | 288. | 281. | 291. |
| 16549 | 230. | 235. | 239. | 240. | 236. | 244. | 256. | 252. | 249. | 254. | 258. | 260. | 260. | 256. | 263. | 269. |
| 16550 | 237. | 231. | 234. | 238. | 241. | 237. | 240. | 244. | 248. | 241. | 251. | 254. | 254. | 252. | 254. | 261. |
| 16551 | 212. | 218. | 222. | 222. | 224. | 227. | 230. | 230. | 231. | 234. | 239. | 237. | 233. | 240. | 235. | 237. |
| 16552 | 251. | 258. | 263. | 262. | 258. | 266. | 268. | 264. | 259. | 270. | 276. | 274. | 265. | 270. | 273. | 278. |
| 16553 | 234. | 225. | 233. | 237. | 237. | 232. | 236. | 240. | 236. | 236. | 247. | 250. | 244. | 242. | 243. | 245. |
| 16554 | 241. | 243. | 243. | 248. | 253. | 249. | 249. | 253. | 259. | 254. | 261. | 268. | 266. | 264. | 272. | 281. |
| 16555 | 214. | 220. | 220. | 225. | 219. | 224. | 221. | 225. | 222. | 228. | 230. | 228. | 226. | 229. | 235. | 237. |
| 16556 | 250. | 260. | 258. | 256. | 261. | 262. | 261. | 261. | 261. | 268. | 266. | 268. | 275. | 276. | | |
| 16557 | 233. | 237. | 240. | 239. | 239. | 234. | 242. | 242. | 243. | 243. | 243. | 247. | 252. | 256. | | |
| 16558 | 237. | 239. | 244. | 246. | 243. | 245. | 252. | 248. | 246. | 255. | 250. | 256. | 255. | 258. | 261. | 263. |
| 16559 | 208. | 225. | 228. | 229. | 223. | 237. | 239. | 239. | 234. | 243. | 252. | 247. | 240. | 254. | 258. | 263. |
| 16560 | 252. | 246. | 236. | 243. | 245. | 243. | 238. | 244. | 246. | 246. | 244. | 248. | 250. | 255. | | |
| 16561 | 230. | 240. | 236. | 237. | 249. | 251. | 254. | 244. | 252. | 258. | 252. | 260. | 265. | 262. | 261. | |
| 16562 | 241. | 235. | 224. | 242. | 244. | 238. | 242. | 246. | 246. | 244. | 254. | 250. | 250. | 249. | 250. | 260. |
| 16563 | 224. | 217. | 221. | 225. | 227. | 225. | 219. | 223. | 229. | 231. | 228. | 226. | 228. | 235. | 231. | |
| 16564 | 251. | 243. | 251. | 252. | 258. | 253. | 254. | 258. | 260. | 260. | 268. | 272. | 269. | 264. | 269. | 275. |
| 16565 | 230. | 228. | 224. | 229. | 233. | 228. | 228. | 230. | 233. | 233. | 232. | 234. | 235. | 236. | | |
| 16566 | 245. | 252. | 249. | 250. | 253. | 259. | 258. | 258. | 264. | 268. | 270. | 266. | 270. | 280. | 276. | |
| 16567 | 223. | 228. | 215. | 231. | 231. | 237. | 234. | 234. | 235. | 239. | 244. | 242. | 238. | 251. | 251. | 250. |
| 16568 | 242. | 246. | 249. | 250. | 248. | 248. | 247. | 244. | 248. | 248. | 254. | 249. | 250. | 250. | 237. | 251. |
| 16569 | 240. | 231. | 236. | 236. | 237. | 236. | 238. | 235. | 236. | 234. | 242. | 246. | 245. | 243. | 245. | 254. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 6): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP III | | 0.1 MG/KG/DAY |
| 16547 | | | |
| 16548 | | | |
| 16549 | 269. | 270. | 272. |
| 16550 | 263. | | |
| 16551 | | | |
| 16552 | | | |
| 16553 | 248. | | |
| 16554 | 278. | | |
| 16555 | | | |
| 16556 | | | |
| 16557 | | | |
| 16558 | 264. | 268. | 272. |
| 16559 | | | |
| 16560 | | | |
| 16561 | | | |
| 16562 | 256. | | |
| 16563 | | | |
| 16564 | 274. | | |
| 16565 | | | |
| 16566 | | | |
| 16567 | | | |
| 16568 | | | |
| 16569 | 255. | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 7): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | | 1.0 MG/KG/DAY | | | | | | | | | | |
| 16570 | 206. | 200. | 210. | 214. | 210. | 215. | 209. | 213. | 219. | 223. | 221. | 216. | 221. | 228. | 228. | 232. |
| 16571 | 262. | 265. | 262. | 268. | 280. | 278. | 277. | 273. | 279. | 283. | 291. | 288. | 289. | 294. | 300. | |
| 16572 | 238. | 232. | 237. | 239. | 244. | 246. | 247. | 243. | 244. | 243. | 248. | 254. | 247. | 244. | 259. | 268. |
| 16573 | 240. | 233. | 238. | 239. | 243. | 237. | 239. | 242. | 243. | 241. | 251. | 248. | 247. | 243. | 246. | 260. |
| 16574 | 216. | 217. | 223. | 220. | 223. | 227. | 232. | 226. | 230. | 238. | 233. | 230. | 232. | 236. | 235. | |
| 16575 | 238. | 258. | 248. | 250. | 250. | 253. | 248. | 250. | 256. | 255. | 250. | 256. | 257. | 262. | 263. | |
| 16576 | 236. | 234. | 231. | 235. | 237. | 237. | 239. | 238. | 247. | 244. | 246. | 246. | 247. | 251. | | |
| 16577 | 233. | 238. | 245. | 243. | 240. | 246. | 241. | 245. | 238. | 221. | 254. | 249. | 246. | 254. | 258. | 260. |
| 16578 | 218. | 218. | 215. | 222. | 222. | 225. | 219. | 222. | 225. | 223. | 223. | 225. | 224. | 224. | | |
| 16579 | 249. | 259. | 263. | 266. | 263. | 272. | 276. | 274. | 271. | 279. | 285. | 289. | 283. | 289. | 296. | 298. |
| 16580 | 231. | 235. | 240. | 237. | 235. | 240. | 248. | 244. | 242. | 247. | 254. | 250. | 247. | 255. | 256. | 259. |
| 16581 | 234. | 241. | 243. | 244. | 245. | 250. | 257. | 256. | 256. | 261. | 257. | 261. | 260. | 263. | 272. | 273. |
| 16582 | 223. | 228. | 226. | 223. | 230. | 233. | 228. | 220. | 228. | 230. | 230. | 226. | 230. | 234. | 238. | |
| 16583 | 246. | 254. | 261. | 260. | 254. | 260. | 263. | 268. | 262. | 269. | 274. | 277. | 269. | 274. | 281. | 286. |
| 16584 | 226. | 232. | 226. | 236. | 241. | 239. | 235. | 241. | 247. | 248. | 244. | 254. | 257. | 258. | | |
| 16585 | 239. | 236. | 246. | 249. | 250. | 249. | 254. | 260. | 255. | 253. | 262. | 265. | 263. | 258. | 265. | 274. |
| 16586 | 222. | 219. | 226. | 228. | 230. | 228. | 231. | 235. | 238. | 236. | 246. | 248. | 244. | 242. | 246. | 253. |
| 16587 | 249. | 259. | 258. | 258. | 256. | 264. | 266. | 265. | 262. | 270. | 277. | 276. | 268. | 279. | 281. | 281. |
| 16588 | 235. | 235. | 236. | 237. | 245. | 248. | 243. | 234. | 242. | 250. | 252. | 241. | 249. | 256. | 262. | |
| 16589 | 241. | 249. | 250. | 249. | 247. | 253. | 255. | 258. | 258. | 262. | 268. | 267. | 263. | 269. | 272. | 277. |
| 16590 | 222. | 221. | 226. | 229. | 229. | 256. | 245. | 229. | 233. | 230. | 230. | 237. | 235. | 236. | 242. | 249. |
| 16591 | 245. | 244. | 250. | 253. | 254. | 241. | 257. | 259. | 261. | 261. | 264. | 267. | 264. | 268. | 273. | 279. |
| 16592 | 222. | 229. | 235. | 234. | 230. | 240. | 235. | 236. | 234. | 237. | 244. | 245. | 238. | 244. | 246. | 246. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 8): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
| 16570 | | | |
| 16571 | | | |
| 16572 | 267. | | |
| 16573 | | | |
| 16574 | | | |
| 16575 | | | |
| 16576 | | | |
| 16577 | | | |
| 16578 | | | |
| 16579 | | | |
| 16580 | | | |
| 16581 | | | |
| 16582 | | | |
| 16583 | | | |
| 16584 | | | |
| 16585 | 275. | | |
| 16586 | 252. | | |
| 16587 | | | |
| 16588 | | | |
| 16589 | | | |
| 16590 | 246. | | |
| 16591 | 275. | | |
| 16592 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 9): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | | 30.0 MG/KG/DAY | | | | | | | | | | |
| 16593 | 224. | 223. | 207. | 228. | 212. | 232. | 232. | 234. | 237. | 241. | 245. | 243. | 241. | 252. | 251. | |
| 16594 | 258. | 258. | 270. | 272. | 273. | 269. | 257. | 275. | 276. | 282. | 279. | 280. | 282. | 288. | 292. | |
| 16595 | 226. | 231. | 240. | 240. | 238. | 247. | 247. | 252. | 248. | 252. | 260. | 260. | 254. | 260. | 255. | 272. |
| 16596 | 240. | 245. | 249. | 258. | 265. | 264. | 266. | 265. | 261. | 266. | 269. | 262. | 255. | 266. | 269. | 273. |
| 16597 | 215. | 211. | 207. | 211. | 214. | 212. | 211. | 212. | 215. | 214. | 213. | 213. | 218. | 213. | | |
| 16598 | 251. | 250. | 258. | 260. | 259. | 259. | 258. | 259. | 262. | 264. | 260. | 258. | 261. | 262. | 270. | 273. |
| 16599 | 229. | 237. | 240. | 238. | 237. | 240. | 244. | 242. | 239. | 245. | 249. | 247. | 241. | 249. | 252. | 255. |
| 16600 | 235. | 241. | 245. | 245. | 241. | 243. | 247. | 244. | 241. | 246. | 253. | 247. | 242. | 247. | 257. | 259. |
| 16601 | 217. | 218. | 214. | 218. | 225. | 221. | 221. | 223. | 227. | 228. | 223. | 229. | 236. | 230. | | |
| 16602 | 251. | 257. | 262. | 263. | 261. | 269. | 270. | 265. | 271. | 275. | 280. | 278. | 275. | 278. | 285. | 273. |
| 16603 | 232. | 238. | 245. | 250. | 257. | 265. | 263. | 267. | 255. | 250. | 264. | 266. | 267. | 260. | 266. | 275. |
| 16604 | 239. | 236. | 239. | 245. | 252. | 253. | 249. | 250. | 252. | 260. | 263. | 263. | 262. | 266. | 262. | 275. |
| 16605 | 215. | 220. | 223. | 223. | 221. | 226. | 231. | 228. | 229. | 233. | 236. | 235. | 231. | 237. | 238. | 243. |
| 16606 | 252. | 255. | 253. | 248. | 253. | 260. | 259. | 244. | 255. | 260. | 268. | 258. | 266. | 272. | 265. | |
| 16607 | 229. | 229. | 235. | 237. | 234. | 233. | 239. | 242. | 240. | 240. | 247. | 249. | 247. | 245. | 247. | 261. |
| 16608 | 240. | 242. | 239. | 248. | 254. | 250. | 244. | 250. | 256. | 257. | 253. | 257. | 260. | 259. | | |
| 16609 | 228. | 228. | 229. | 227. | 235. | 239. | 238. | 232. | 240. | 244. | 246. | 240. | 247. | 255. | 256. | |
| 16610 | 244. | 252. | 258. | 257. | 257. | 255. | 261. | 267. | 269. | 267. | 266. | 273. | 273. | 277. | 270. | |
| 16611 | 224. | 228. | 226. | 230. | 227. | 229. | 232. | 224. | 225. | 228. | 239. | 235. | 228. | 237. | 233. | 246. |
| 16612 | 237. | 234. | 243. | 240. | 242. | 240. | 245. | 245. | 246. | 242. | 244. | 250. | 250. | 244. | 258. | 265. |
| 16613 | 231. | 232. | 228. | 228. | 238. | 242. | 240. | 232. | 242. | 245. | 242. | 242. | 244. | 252. | 256. | |
| 16614 | 247. | 248. | 255. | 256. | 260. | 267. | 266. | 268. | 271. | 279. | 284. | 278. | 280. | 288. | 292. | |
| 16615 | 247. | 251. | 256. | 259. | 263. | 272. | 272. | 277. | 273. | 285. | 289. | 288. | 286. | 290. | 278. | 288. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B21 (PAGE 10): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP V | | 30.0 MG/KG/DAY |
| 16593 | | | |
| 16594 | | | |
| 16595 | 270. | | |
| 16596 | | | |
| 16597 | | | |
| 16598 | | | |
| 16599 | | | |
| 16600 | | | |
| 16601 | | | |
| 16602 | | | |
| 16603 | 276. | | |
| 16604 | | | |
| 16605 | | | |
| 16606 | | | |
| 16607 | 258. | | |
| 16608 | | | |
| 16609 | | | |
| 16610 | | | |
| 16611 | | | |
| 16612 | 266. | | |
| 16613 | | | |
| 16614 | | | |
| 16615 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 1): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16501 P | 236. | 236. | 244. | 247. | 249. | 250. | 256. | 262. | 258. | 269. | 269. | 276. | 280. |
| 16502 P | 283. | 287. | 302. | 302. | 310. | 304. | 304. | 305. | 319. | 323. | 323. | 323. | 334. |
| 16503 P | 264. | 266. | 282. | 282. | 286. | 293. | 291. | 299. | 305. | 312. | 312. | 314. | 328. |
| 16504 P | 262. | 269. | 273. | 279. | 285. | 281. | 288. | 286. | 294. | 300. | 297. | 311. | 313. |
| 16505 P | 248. | 251. | 255. | 260. | 261. | 263. | 268. | 271. | 275. | 278. | 282. | 286. | 298. |
| 16506 P | 229. | 242. | 262. | 262. | 274. | 282. | 288. | 287. | 304. | 308. | 307. | 312. | 325. |
| 16508 P | 262. | 266. | 266. | 277. | 283. | 283. | 292. | 294. | 294. | 300. | 306. | 309. | 307. |
| 16509 P | 219. | 229. | 238. | 245. | 243. | 252. | 251. | 250. | 257. | 261. | 266. | 277. | 280. |
| 16510 P | 285. | 291. | 298. | 301. | 302. | 305. | 304. | 317. | 311. | 318. | 326. | 331. | 330. |
| 16513 P | 238. | 248. | 254. | 255. | 263. | 266. | 272. | 280. | 280. | 288. | 287. | 301. | 309. |
| 16514 P | 269. | 280. | 290. | 285. | 286. | 291. | 294. | 300. | 305. | 308. | 310. | 318. | 321. |
| 16515 P | 250. | 254. | 258. | 260. | 264. | 268. | 274. | 273. | 275. | 278. | 283. | 289. | 294. |
| 16516 P | 257. | 255. | 267. | 272. | 272. | 278. | 281. | 281. | 286. | 292. | 298. | 303. | 309. |
| 16519 P | 253. | 256. | 257. | 266. | 263. | 272. | 272. | 270. | 280. | 286. | 292. | 293. | 298. |
| 16521 P | 264. | 264. | 274. | 281. | 283. | 286. | 290. | 295. | 301. | 303. | 307. | 309. | 318. |
| 16522 P | 278. | 283. | 293. | 303. | 305. | 314. | 321. | 322. | 331. | 336. | 340. | 350. | 356. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 2): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | |
| 16501 P | 285. | 288. | 295. | 310. | 326. | 341. | 356. | 376. | 400. |
| 16502 P | 332. | 338. | 344. | 360. | 370. | 380. | 393. | 415. | 432. |
| 16503 P | 329. | 332. | 333. | 345. | 356. | 372. | 384. | 402. | 410. |
| 16504 P | 315. | 317. | 318. | 339. | 348. | 364. | 374. | 388. | 407. |
| 16505 P | 296. | 301. | 306. | 320. | 327. | 341. | 359. | 374. | 392. |
| 16506 P | 326. | 326. | 333. | 342. | 355. | 366. | 385. | 398. | 428. |
| 16508 P | 319. | 324. | 331. | 335. | 349. | 370. | 384. | 396. | 419. |
| 16509 P | 281. | 280. | 288. | 303. | 315. | 323. | 338. | 354. | 372. |
| 16510 P | 338. | 343. | 346. | 353. | 376. | 393. | 406. | 423. | 443. |
| 16513 P | 313. | 316. | 320. | 339. | 349. | 362. | 380. | 398. | 419. |
| 16514 P | 322. | 328. | 331. | 342. | 363. | 374. | 394. | 408. | 423. |
| 16515 P | 291. | 300. | 311. | 318. | 323. | 341. | 361. | 371. | 388. |
| 16516 P | 318. | 324. | 327. | 328. | 348. | 362. | 375. | 388. | 402. |
| 16519 P | 300. | 310. | 314. | 318. | 330. | 343. | 356. | 374. | 392. |
| 16521 P | 328. | 332. | 331. | 340. | 357. | 372. | 384. | 399. | 422. |
| 16522 P | 364. | 364. | 367. | 381. | 390. | 411. | 427. | 439. | 451. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 3): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16524 P | 215. | 223. | 229. | 239. | 243. | 248. | 252. | 255. | 265. | 269. | 273. | 274. | 281. |
| 16525 P | 297. | 302. | 312. | 313. | 315. | 325. | 331. | 331. | 338. | 353. | 350. | 352. | 364. |
| 16526 P | 248. | 259. | 269. | 274. | 282. | 284. | 287. | 291. | 297. | 303. | 296. | 316. | 325. |
| 16528 P | 228. | 230. | 234. | 246. | 252. | 258. | 262. | 265. | 269. | 270. | 281. | 287. | 289. |
| 16529 P | 296. | 300. | 314. | 324. | 326. | 336. | 339. | 342. | 346. | 357. | 361. | 363. | 377. |
| 16531 P | 264. | 276. | 281. | 290. | 288. | 295. | 296. | 298. | 300. | 305. | 312. | 318. | 319. |
| 16532 P | 256. | 266. | 270. | 276. | 281. | 282. | 282. | 287. | 291. | 292. | 298. | 309. | 321. |
| 16535 P | 268. | 274. | 282. | 292. | 300. | 300. | 306. | 306. | 323. | 316. | 323. | 329. | 340. |
| 16536 P | 244. | 245. | 253. | 257. | 264. | 265. | 269. | 268. | 273. | 279. | 283. | 289. | 288. |
| 16539 P | 257. | 262. | 270. | 269. | 279. | 284. | 285. | 291. | 292. | 298. | 305. | 310. | 308. |
| 16540 P | 242. | 251. | 254. | 263. | 273. | 272. | 277. | 278. | 288. | 295. | 300. | 298. | 302. |
| 16541 P | 259. | 274. | 274. | 277. | 280. | 268. | 268. | 274. | 277. | 287. | 293. | 309. | 303. |
| 16542 P | 250. | 260. | 266. | 276. | 278. | 282. | 282. | 289. | 287. | 290. | 294. | 297. | 306. |
| 16544 P | 240. | 243. | 244. | 255. | 258. | 260. | 261. | 262. | 270. | 271. | 280. | 282. | 286. |
| 16545 P | 278. | 255. | 289. | 296. | 297. | 306. | 307. | 308. | 321. | 322. | 325. | 331. | 338. |
| 16546 P | 260. | 271. | 285. | 284. | 290. | 296. | 296. | 300. | 296. | 310. | 315. | 312. | 329. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 4): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | |
| 16524 P | 290. | 292. | 294. | 302. | 317. | 332. | 341. | 358. | 374. |
| 16525 P | 370. | 374. | 368. | 381. | 400. | 413. | 430. | 452. | 468. |
| 16526 P | 328. | 326. | 329. | 344. | 359. | 373. | 389. | 412. | 432. |
| 16528 P | 292. | 298. | 305. | 310. | 327. | 343. | 356. | 375. | 390. |
| 16529 P | 378. | 381. | 381. | 391. | 410. | 425. | 432. | 453. | 480. |
| 16531 P | 324. | 324. | 325. | 339. | 351. | 369. | 382. | 401. | 432. |
| 16532 P | 320. | 319. | 330. | 347. | 365. | 377. | 401. | 412. | 428. |
| 16535 P | 342. | 351. | 354. | 368. | 378. | 400. | 418. | 434. | 457. |
| 16536 P | 297. | 306. | 308. | 314. | 326. | 347. | 361. | 376. | 395. |
| 16539 P | 311. | 321. | 328. | 336. | 347. | 361. | 376. | 395. | 409. |
| 16540 P | 313. | 312. | 323. | 328. | 335. | 355. | 372. | 383. | 393. |
| 16541 P | 296. | 308. | 321. | 330. | 342. | 356. | 381. | 399. | 421. |
| 16542 P | 310. | 314. | 318. | 328. | 345. | 371. | 386. | 408. | 423. |
| 16544 P | 293. | 299. | 306. | 307. | 321. | 341. | 360. | 372. | 396. |
| 16545 P | 346. | 348. | 348. | 344. | 369. | 386. | 401. | 415. | 440. |
| 16546 P | 334. | 334. | 338. | 341. | 365. | 382. | 389. | 412. | 433. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 5): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16547 P | 240. | 251. | 253. | 265. | 267. | 277. | 277. | 286. | 286. | 298. | 298. | 310. | 312. |
| 16548 P | 297. | 300. | 305. | 315. | 320. | 323. | 324. | 333. | 336. | 342. | 347. | 354. | 356. |
| 16550 P | 263. | 275. | 284. | 289. | 293. | 299. | 302. | 307. | 316. | 316. | 317. | 326. | 337. |
| 16552 P | 279. | 287. | 299. | 304. | 312. | 315. | 315. | 320. | 324. | 330. | 339. | 339. | 342. |
| 16553 P | 239. | 255. | 264. | 267. | 269. | 271. | 270. | 280. | 286. | 285. | 281. | 299. | 302. |
| 16554 P | 279. | 287. | 297. | 300. | 305. | 298. | 309. | 316. | 318. | 319. | 319. | 330. | 340. |
| 16555 P | 242. | 243. | 252. | 249. | 256. | 257. | 255. | 267. | 265. | 273. | 271. | 282. | 285. |
| 16557 P | 257. | 258. | 271. | 270. | 280. | 282. | 284. | 290. | 297. | 299. | 306. | 316. | 316. |
| 16559 P | 259. | 264. | 277. | 275. | 285. | 292. | 291. | 294. | 301. | 308. | 310. | 312. | 319. |
| 16560 P | 254. | 262. | 268. | 271. | 277. | 284. | 286. | 285. | 290. | 290. | 302. | 308. | 316. |
| 16561 P | 262. | 262. | 267. | 273. | 277. | 278. | 286. | 286. | 290. | 290. | 306. | 308. | 311. |
| 16562 P | 256. | 262. | 276. | 274. | 280. | 284. | 283. | 289. | 294. | 294. | 295. | 306. | 307. |
| 16563 P | 241. | 237. | 238. | 245. | 253. | 253. | 255. | 261. | 261. | 272. | 276. | 273. | 277. |
| 16565 P | 232. | 246. | 248. | 255. | 261. | 266. | 266. | 270. | 274. | 282. | 289. | 294. | 298. |
| 16566 P | 281. | 287. | 294. | 300. | 308. | 310. | 312. | 310. | 322. | 320. | 328. | 339. | 334. |
| 16567 P | 248. | 258. | 268. | 270. | 272. | 279. | 281. | 280. | 285. | 287. | 290. | 293. | 298. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 6): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | |
| 16547 P | 322. | 322. | 327. | 341. | 350. | 364. | 380. | 396. | 416. |
| 16548 P | 370. | 375. | 377. | 391. | 402. | 422. | 437. | 454. | 466. |
| 16550 P | 341. | 337. | 347. | 356. | 372. | 386. | 402. | 424. | 438. |
| 16552 P | 350. | 351. | 353. | 367. | 387. | 399. | 420. | 436. | 451. |
| 16553 P | 305. | 303. | 312. | 328. | 346. | 359. | 383. | 398. | 426. |
| 16554 P | 340. | 338. | 345. | 359. | 371. | 388. | 400. | 411. | 423. |
| 16555 P | 285. | 293. | 302. | 313. | 328. | 345. | 353. | 375. | 400. |
| 16557 P | 319. | 328. | 340. | 345. | 358. | 366. | 387. | 402. | 431. |
| 16559 P | 331. | 329. | 340. | 343. | 359. | 389. | 396. | 423. | 438. |
| 16560 P | 311. | 323. | 334. | 339. | 347. | 373. | 394. | 399. | 420. |
| 16561 P | 324. | 329. | 336. | 348. | 360. | 380. | 403. | 414. | 430. |
| 16562 P | 313. | 314. | 317. | 332. | 343. | 361. | 380. | 396. | 418. |
| 16563 P | 288. | 293. | 297. | 305. | 317. | 346. | 360. | 368. | 376. |
| 16565 P | 298. | 312. | 322. | 329. | 341. | 356. | 372. | 393. | 414. |
| 16566 P | 341. | 329. | 341. | 364. | 368. | 392. | 409. | 426. | 442. |
| 16567 P | 306. | 303. | 310. | 314. | 330. | 345. | 359. | 371. | 391. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 7): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16570 P | 229. | 237. | 240. | 254. | 250. | 258. | 259. | 264. | 267. | 276. | 274. | 281. | 288. |
| 16571 P | 307. | 312. | 316. | 320. | 324. | 329. | 327. | 335. | 338. | 340. | 345. | 348. | 354. |
| 16574 P | 242. | 246. | 251. | 252. | 257. | 260. | 263. | 266. | 273. | 280. | 285. | 286. | 295. |
| 16575 P | 268. | 272. | 274. | 279. | 288. | 288. | 295. | 298. | 300. | 302. | 310. | 320. | 315. |
| 16576 P | 254. | 261. | 264. | 266. | 267. | 278. | 276. | 287. | 281. | 288. | 292. | 301. | 305. |
| 16577 P | 254. | 268. | 278. | 286. | 282. | 293. | 292. | 293. | 301. | 305. | 309. | 310. | 321. |
| 16578 P | 233. | 235. | 239. | 239. | 245. | 253. | 241. | 253. | 254. | 261. | 263. | 270. | 272. |
| 16579 P | 300. | 305. | 310. | 320. | 319. | 324. | 327. | 325. | 336. | 343. | 343. | 354. | 365. |
| 16580 P | 257. | 264. | 272. | 281. | 281. | 291. | 292. | 292. | 302. | 309. | 308. | 311. | 326. |
| 16581 P | 278. | 280. | 286. | 288. | 289. | 297. | 297. | 304. | 312. | 311. | 316. | 326. | 329. |
| 16582 P | 238. | 244. | 249. | 257. | 266. | 268. | 276. | 272. | 279. | 285. | 287. | 294. | 299. |
| 16583 P | 285. | 295. | 302. | 311. | 311. | 323. | 328. | 328. | 337. | 342. | 348. | 350. | 356. |
| 16584 P | 258. | 263. | 275. | 278. | 288. | 298. | 300. | 305. | 308. | 314. | 321. | 330. | 334. |
| 16587 P | 284. | 292. | 303. | 307. | 303. | 312. | 322. | 321. | 334. | 338. | 341. | 338. | 354. |
| 16589 P | 271. | 279. | 288. | 285. | 291. | 297. | 289. | 290. | 295. | 290. | 295. | 304. | 312. |
| 16592 P | 247. | 251. | 260. | 260. | 264. | 265. | 272. | 274. | 276. | 284. | 283. | 287. | 292. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B22 (PAGE 8): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | |
| 16570 P | 293. | 298. | 295. | 306. | 321. | 332. | 349. | 362. | 374. |
| 16571 P | 358. | 370. | 373. | 385. | 390. | 417. | 427. | 433. | 456. |
| 16574 P | 299. | 305. | 311. | 323. | 330. | 346. | 364. | 376. | 394. |
| 16575 P | 329. | 332. | 345. | 347. | 362. | 376. | 395. | 406. | 431. |
| 16576 P | 305. | 313. | 323. | 338. | 339. | 361. | 379. | 397. | 411. |
| 16577 P | 325. | 335. | 333. | 347. | 356. | 372. | 388. | 406. | 404. |
| 16578 P | 273. | 279. | 290. | 300. | 312. | 319. | 330. | 359. | 354. |
| 16579 P | 370. | 372. | 377. | 391. | 403. | 415. | 438. | 451. | 470. |
| 16580 P | 335. | 339. | 344. | 351. | 369. | 383. | 401. | 422. | 439. |
| 16581 P | 338. | 342. | 352. | 357. | 369. | 390. | 399. | 416. | 440. |
| 16582 P | 302. | 312. | 316. | 328. | 336. | 356. | 375. | 388. | 403. |
| 16583 P | 368. | 375. | 380. | 382. | 397. | 413. | 426. | 447. | 474. |
| 16584 P | 334. | 341. | 348. | 360. | 370. | 378. | 397. | 415. | 434. |
| 16587 P | 360. | 362. | 365. | 380. | 401. | 414. | 434. | 453. | 474. |
| 16589 P | 313. | 328. | 337. | 342. | 354. | 384. | 402. | 425. | 442. |
| 16592 P | 297. | 300. | 303. | 306. | 322. | 332. | 348. | 366. | 384. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B22 (PAGE 9): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16593 P | 255. | 258. | 260. | 266. | 272. | 273. | 282. | 283. | 288. | 292. | 300. | 305. | 308. |
| 16594 P | 287. | 299. | 309. | 314. | 317. | 321. | 323. | 328. | 334. | 338. | 342. | 346. | 350. |
| 16596 P | 273. | 275. | 285. | 292. | 295. | 302. | 304. | 301. | 296. | 311. | 315. | 318. | 322. |
| 16597 P | 213. | 223. | 231. | 229. | 234. | 240. | 242. | 249. | 253. | 251. | 250. | 259. | 265. |
| 16598 P | 271. | 279. | 291. | 291. | 295. | 304. | 303. | 307. | 307. | 316. | 317. | 326. | 327. |
| 16600 P | 262. | 267. | 273. | 279. | 281. | 284. | 286. | 290. | 294. | 302. | 305. | 308. | 310. |
| 16601 P | 237. | 242. | 250. | 255. | 260. | 264. | 267. | 269. | 274. | 280. | 279. | 291. | 297. |
| 16602 P | 270. | 291. | 298. | 299. | 303. | 304. | 305. | 311. | 311. | 312. | 315. | 324. | 325. |
| 16605 P | 242. | 251. | 263. | 268. | 271. | 276. | 284. | 286. | 289. | 298. | 297. | 302. | 310. |
| 16606 P | 277. | 281. | 282. | 291. | 296. | 297. | 302. | 305. | 302. | 310. | 321. | 330. | 329. |
| 16608 P | 262. | 264. | 279. | 280. | 291. | 297. | 297. | 306. | 307. | 312. | 313. | 320. | 328. |
| 16609 P | 255. | 264. | 269. | 276. | 285. | 284. | 288. | 287. | 294. | 298. | 307. | 313. | 313. |
| 16610 P | 279. | 282. | 292. | 300. | 307. | 308. | 311. | 317. | 320. | 327. | 336. | 337. | 346. |
| 16611 P | 242. | 243. | 254. | 259. | 260. | 266. | 268. | 269. | 275. | 278. | 290. | 286. | 297. |
| 16613 P | 264. | 270. | 261. | 272. | 277. | 278. | 280. | 282. | 287. | 289. | 304. | 303. | 309. |
| 16614 P | 294. | 301. | 305. | 316. | 321. | 325. | 330. | 337. | 337. | 343. | 352. | 356. | 368. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B22 (PAGE 10): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | |
| 16593 P | 314. | 327. | 333. | 334. | 350. | 372. | 378. | 392. | 405. |
| 16594 P | 356. | 361. | 368. | 383. | 394. | 411. | 425. | 434. | 453. |
| 16596 P | 336. | 343. | 342. | 358. | 373. | 395. | 410. | 434. | 445. |
| 16597 P | 271. | 273. | 283. | 291. | 299. | 318. | 333. | 348. | 373. |
| 16598 P | 334. | 335. | 343. | 350. | 356. | 376. | 395. | 415. | 434. |
| 16600 P | 316. | 321. | 331. | 338. | 357. | 377. | 395. | 418. | 426. |
| 16601 P | 300. | 306. | 319. | 325. | 337. | 352. | 337. | 353. | 369. |
| 16602 P | 332. | 336. | 350. | 357. | 367. | 387. | 402. | 418. | 442. |
| 16605 P | 313. | 314. | 319. | 320. | 336. | 352. | 364. | 375. | 393. |
| 16606 P | 337. | 346. | 353. | 363. | 376. | 400. | 413. | 430. | 447. |
| 16608 P | 332. | 341. | 353. | 361. | 370. | 382. | 409. | 424. | 437. |
| 16609 P | 322. | 327. | 332. | 336. | 349. | 370. | 383. | 392. | 410. |
| 16610 P | 353. | 360. | 368. | 381. | 390. | 414. | 434. | 445. | 468. |
| 16611 P | 302. | 307. | 309. | 305. | 343. | 354. | 371. | 386. | 407. |
| 16613 P | 320. | 323. | 329. | 343. | 353. | 375. | 392. | 409. | 431. |
| 16614 P | 373. | 382. | 388. | 400. | 415. | 429. | 448. | 465. | 492. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B23 (PAGE 1): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16501 | 32. | 41. | 43. | 25. | 32. | 36. | 24. | 30. | 33. | 28. | 34. | 28. | 31. |
| 16502 | 27. | 37. | 38. | 33. | 40. | 34. | 32. | 32. | 24. | 28. | 29. | 32. | 24. |
| 16503 | 27. | 29. | 29. | 15. | 23. | 31. | 23. | 21. | 24. | 25. | 24. | 20. | 25. |
| 16504 | 21. | 27. | 29. | 23. | 17. | 31. | 32. | 21. | 22. | 27. | 25. | 21. | 25. |
| 16505 | 30. | 23. | 22. | 26. | 29. | 31. | 20. | 25. | 29. | 28. | 20. | 28. | 29. |
| 16506 | 35. | 44. | 42. | 35. | 38. | 43. | 40. | 16. | 23. | 25. | 33. | 31. | 39. |
| 16507 | 21. | 28. | 31. | 25. | 26. | 33. | 31. | 27. | 26. | 29. | 33. | 32. | 27. |
| 16508 | 30. | 30. | 23. | 28. | 32. | 29. | 22. | 26. | 31. | 23. | 22. | 28. | 32. |
| 16509 | 18. | 25. | 24. | 45. | 20. | 38. | 29. | 21. | 21. | 34. | 60. | 27. | 55. |
| 16510 | 37. | 34. | 36. | 28. | 52. | 45. | 32. | 33. | 36. | 36. | 38. | 32. | 33. |
| 16511 | 26. | 33. | 55. | 30. | 36. | 39. | 38. | b | 36. | b | 54. | 50. | 27. |
| 16512 | 28. | 30. | 28. | 20. | 28. | 29. | 23. | 22. | 25. | 34. | 25. | 25. | 29. |
| 16513 | 19. | 22. | 25. | 21. | 18. | 21. | 22. | 18. | 18. | 22. | 24. | 21. | 19. |
| 16514 | 21. | 32. | 34. | 31. | 30. | 30. | 19. | 13. | 7. | 38. | 39. | 39. | 37. |
| 16515 | 37. | 24. | 37. | 35. | 32. | 27. | 33. | 28. | 27. | 28. | 33. | 40. | 29. |
| 16516 | 23. | 25. | 21. | 19. | 26. | 24. | 24. | 20. | 26. | 29. | 24. | 20. | 24. |
| 16517 | 16. | 22. | 26. | 21. | 13. | 27. | 23. | 27. | 18. | 24. | 47. | 25. | 18. |
| 16518 | 18. | 27. | 28. | 28. | 18. | 28. | 26. | 21. | 18. | 24. | 25. | 23. | 15. |
| 16519 | 31. | 26. | 26. | 26. | 31. | 31. | 20. | 28. | 29. | 34. | 33. | 30. | 31. |
| 16520 | 30. | 30. | 32. | 19. | 33. | 38. | 27. | 27. | 30. | 31. | 29. | 26. | 30. |
| 16521 | 37. | 38. | 41. | 23. | 35. | 37. | 32. | 18. | 47. | 38. | 30. | 39. | 34. |
| 16522 | 31. | 30. | 30. | 18. | 31. | 34. | 31. | 21. | 36. | 25. | 32. | 18. | 31. |
| 16523 | 15. | 24. | 23. | 21. | 15. | 26. | 22. | 23. | 13. | 28. | 23. | 22. | 17. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE B23 (PAGE 2): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16524 | 23. | 27. | 27. | 22. | 27. | 27. | 24. | 27. | 46. | 24. | 27. | 22. | 23. |
| 16525 | 30. | 34. | 32. | 17. | 30. | 35. | 33. | 28. | 33. | 32. | 30. | 24. | 34. |
| 16526 | 28. | 30. | 36. | 23. | 23. | 40. | 29. | 29. | 25. | 28. | 31. | 32. | 19. |
| 16527 | 52. | 37. | 47. | 37. | 49. | 45. | b | b | b | b | b | b | b |
| 16528 | 25. | 26. | 22. | 31. | 27. | 36. | 30. | 28. | 31. | 34. | 37. | 36. | 45. |
| 16529 | 33. | 42. | 37. | 20. | 36. | 36. | 31. | 29. | 33. | 29. | 32. | 25. | 34. |
| 16530 | 29. | 29. | 29. | b | 30. | 27. | 23. | 25. | 33. | 29. | 26. | 29. | 23. |
| 16531 | 26. | 26. | 26. | 17. | 28. | 30. | 26. | 16. | 27. | 28. | 23. | 19. | 24. |
| 16532 | 33. | 40. | 36. | 33. | 25. | 36. | 36. | 32. | 37. | 42. | 56. | 59. | 52. |
| 16533 | 19. | 24. | 24. | 22. | 19. | 24. | 23. | 22. | 21. | 26. | 24. | 22. | 17. |
| 16534 | 18. | 24. | 28. | 24. | 18. | 27. | 26. | 23. | 21. | 28. | 27. | 27. | 20. |
| 16535 | 36. | 35. | 33. | 25. | 25. | 38. | 29. | 31. | 26. | 22. | 34. | 35. | 30. |
| 16536 | 21. | 17. | 17. | 16. | 18. | 17. | 12. | 18. | 19. | 19. | 11. | 19. | 20. |
| 16537 | 29. | 28. | 29. | 27. | 27. | 30. | 27. | 25. | 24. | 29. | 29. | 32. | 27. |
| 16538 | 33. | 39. | 42. | 41. | 34. | 28. | 37. | 41. | 40. | 36. | 31. | 42. | 39. |
| 16539 | 22. | 23. | 24. | 25. | 23. | 26. | 22. | 26. | 27. | 25. | 29. | 27. | 24. |
| 16540 | 30. | 23. | 18. | 25. | 23. | 23. | 18. | 22. | 27. | 25. | 18. | 23. | 27. |
| 16541 | 32. | 21. | 33. | 31. | 34. | 21. | 28. | 35. | 33. | 23. | 32. | 31. | 29. |
| 16542 | 27. | 38. | 40. | 28. | 34. | 33. | 33. | 27. | 37. | 41. | 36. | 28. | 33. |
| 16543 | 26. | 30. | 29. | 32. | 25. | 28. | 33. | 29. | 22. | 32. | 29. | 28. | 25. |
| 16544 | 25. | 23. | 19. | 27. | 26. | 28. | 21. | 24. | 28. | 29. | 41. | 27. | 30. |
| 16545 | 39. | 41. | 37. | 29. | 44. | 48. | 40. | 31. | 39. | 47. | 23. | 33. | 38. |
| 16546 | 35. | 35. | 32. | 32. | 34. | 33. | 35. | 30. | 40. | 37. | 37. | 33. | 35. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B23 (PAGE 3): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16547 | 28. | 33. | 33. | 16. | 24. | 34. | 30. | 20. | 34. | 27. | 28. | 21. | 28. |
| 16548 | 28. | 36. | 32. | 24. | 28. | 36. | 25. | 24. | 34. | 26. | 30. | 28. | 31. |
| 16549 | 27. | 31. | 29. | 23. | 27. | 35. | 28. | 20. | 28. | 28. | 30. | 30. | 21. |
| 16550 | 32. | b | 62. | b | 51. | 47. | 48. | 36. | 33. | b | b | 59. | 52. |
| 16551 | 30. | 32. | 35. | 26. | 31. | 35. | 35. | 26. | 33. | 33. | 31. | 30. | 31. |
| 16552 | 36. | 37. | 36. | 22. | 29. | 44. | 31. | 19. | 33. | 35. | 34. | 22. | 28. |
| 16553 | 30. | 33. | 32. | 27. | 21. | 34. | 34. | 28. | 20. | 41. | 32. | 29. | 20. |
| 16554 | 41. | 32. | 38. | 33. | 27. | 38. | 31. | 32. | 26. | 37. | 37. | 31. | 26. |
| 16555 | 32. | 29. | 34. | 29. | 28. | 31. | 30. | 27. | 39. | 31. | 31. | 34. | 30. |
| 16556 | 48. | 40. | 28. | 36. | 34. | 40. | 29. | 34. | 48. | 34. | 34. | 44. | 44. |
| 16557 | 30. | 36. | 42. | 30. | 25. | 38. | 30. | 29. | 40. | 34. | 31. | 48. | 32. |
| 16558 | 31. | 32. | 40. | 20. | 28. | 43. | 23. | 20. | 27. | 19. | 36. | 21. | 24. |
| 16559 | 36. | 35. | 38. | 22. | 37. | 44. | 33. | 28. | 39. | 39. | 35. | 22. | 33. |
| 16560 | 27. | 21. | 33. | 32. | 26. | 22. | 31. | 34. | 28. | 23. | 29. | 37. | 34. |
| 16561 | 37. | 36. | 33. | 35. | 35. | 46. | 24. | 32. | 40. | 37. | 37. | 36. | 37. |
| 16562 | 21. | 13. | 30. | 28. | 17. | 29. | 29. | 30. | 20. | 25. | 26. | 32. | 24. |
| 16563 | 18. | 26. | 29. | 27. | 22. | 23. | 26. | 29. | 27. | 20. | 19. | 26. | 26. |
| 16564 | 22. | 29. | 33. | 33. | 25. | 28. | 28. | 29. | 28. | 30. | 35. | 29. | 24. |
| 16565 | 31. | 28. | 32. | c | 47. | 27. | 29. | 34. | 29. | 26. | 29. | 31. | 32. |
| 16566 | 30. | 28. | 24. | 29. | 32. | 29. | 22. | 27. | 32. | 30. | 26. | 29. | 35. |
| 16567 | 30. | 17. | 31. | 22. | 26. | 28. | 24. | 23. | 28. | 24. | 30. | 22. | 28. |
| 16568 | 28. | 24. | 26. | 28. | 26. | 34. | 20. | 28. | 24. | 27. | 26. | 27. | 27. |
| 16569 | 25. | 30. | 31. | 24. | 24. | 32. | 25. | 29. | 25. | 28. | 33. | 26. | 21. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.
c. Value incorrectly recorded.

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TABLE B23 (PAGE 4): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16570 | 13. | 26. | 30. | 20. | 21. | 16. | 28. | 32. | 36. | 21. | 18. | 26. | 30. |
| 16571 | 33. | 27. | 40. | 39. | 36. | 33. | 24. | 38. | 37. | 42. | 37. | 34. | 39. |
| 16572 | 23. | 28. | 27. | 28. | 26. | 35. | 25. | 22. | 24. | 29. | 28. | 26. | 21. |
| 16573 | 24. | 32. | 34. | 30. | 24. | 36. | 37. | 31. | 29. | 31. | 32. | 35. | 23. |
| 16574 | 32. | 32. | 30. | 29. | 30. | 35. | 25. | 29. | 31. | 32. | 27. | 33. | 31. |
| 16575 | 37. | 26. | 28. | 25. | 27. | 23. | 25. | 31. | 29. | 21. | 32. | 30. | 27. |
| 16576 | 23. | 18. | 21. | 23. | 23. | 24. | 26. | 26. | 25. | 22. | 27. | 25. | 24. |
| 16577 | 34. | 30. | 29. | 25. | 34. | 35. | 28. | 23. | 16. | 41. | 33. | 24. | 29. |
| 16578 | 21. | 18. | 28. | 24. | 27. | 22. | 26. | 25. | 24. | 21. | 27. | 27. | 25. |
| 16579 | 28. | 28. | 25. | 20. | 25. | 30. | 24. | 19. | 27. | 32. | 18. | 22. | 25. |
| 16580 | b | b | b | b | b | 45. | b | 55. | b | 59. | 42. | b | b |
| 16581 | 31. | 34. | 36. | 26. | 34. | 38. | 26. | 23. | 37. | 32. | 32. | 23. | 27. |
| 16582 | 26. | 21. | 19. | 27. | 23. | 24. | 20. | 23. | 27. | 22. | 17. | 25. | 26. |
| 16583 | 29. | 26. | 29. | 30. | b | 33. | 33. | 27. | 38. | 33. | 36. | 35. | 32. |
| 16584 | 29. | 24. | 35. | 34. | 30. | 29. | 31. | 33. | 34. | 27. | 33. | 39. | 26. |
| 16585 | 24. | 35. | 36. | 33. | 26. | 34. | 34. | 40. | 30. | 37. | 37. | 37. | 24. |
| 16586 | 22. | 24. | 24. | 28. | 21. | 27. | 29. | 25. | 21. | 27. | 26. | 23. | 19. |
| 16587 | 47. | 41. | b | 41. | 46. | 46. | b | b | b | b | b | 22. | b |
| 16588 | 39. | 37. | 35. | 36. | 36. | 39. | 20. | 32. | 32. | 32. | 20. | 38. | 33. |
| 16589 | b | b | b | b | b | b | b | b | b | b | b | c | b |
| 16590 | 21. | 30. | 31. | 27. | 23. | 39. | 28. | 30. | 24. | 30. | b | b | 28. |
| 16591 | 27. | 36. | 39. | 34. | 29. | 29. | 29. | 32. | 29. | 34. | 40. | 32. | 29. |
| 16592 | 31. | 30. | 30. | 19. | 30. | 28. | 26. | 21. | 22. | 30. | 31. | 20. | 28. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.
c. Value incorrectly recorded.

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TABLE B23 (PAGE 5): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16593 | 21. | 16. | 32. | 13. | 31. | 29. | 26. | 25. | 33. | 26. | 24. | 25. | 25. |
| 16594 | 31. | 38. | 36. | 31. | 17. | 7. | 42. | 40. | 36. | 32. | 34. | 33. | 33. |
| 16595 | 25. | 29. | 22. | 22. | 26. | 31. | 25. | 19. | 27. | 26. | 28. | 25. | 23. |
| 16596 | 34. | 37. | 37. | 38. | 37. | 43. | 37. | 22. | 28. | 27. | 27. | 20. | 28. |
| 16597 | 24. | 19. | 24. | 23. | 21. | 19. | 23. | 23. | 26. | 20. | 28. | 29. | 26. |
| 16598 | 31. | 35. | 47. | 38. | 33. | 37. | 29. | 32. | 33. | 34. | 27. | 33. | 27. |
| 16599 | 23. | 32. | 25. | 25. | 23. | 30. | 23. | 22. | 28. | 23. | 26. | 20. | 24. |
| 16600 | 24. | 34. | 30. | 20. | 24. | 34. | 18. | 21. | 22. | 30. | 28. | 23. | 26. |
| 16601 | 26. | 22. | 27. | 32. | 26. | 26. | 24. | 26. | 30. | 23. | 28. | 31. | 26. |
| 16602 | 47. | 40. | 47. | 34. | 43. | b | 37. | 38. | b | 50. | 38. | 40. | b |
| 16603 | 36. | 36. | 38. | 41. | 40. | 38. | 43. | 30. | 29. | 45. | 38. | 49. | 30. |
| 16604 | 36. | 33. | 42. | 39. | 32. | 35. | 25. | 35. | 34. | 30. | 31. | 28. | 33. |
| 16605 | 33. | 33. | 33. | 22. | 31. | 43. | 30. | 23. | 36. | 39. | 37. | 25. | 34. |
| 16606 | 32. | 32. | 32. | 32. | 33. | 33. | 15. | 35. | 34. | 37. | 33. | 34. | 34. |
| 16607 | 26. | 30. | 33. | 30. | 24. | 33. | 29. | 28. | 26. | 30. | 37. | 26. | 24. |
| 16608 | 30. | 26. | 38. | 28. | 27. | 19. | 28. | 30. | 45. | 30. | 27. | 42. | 23. |
| 16609 | 26. | 19. | 20. | 26. | 26. | 29. | 20. | 30. | 31. | 27. | 23. | 27. | 30. |
| 16610 | 32. | 33. | 30. | 25. | 23. | 43. | 33. | 29. | 26. | 26. | 39. | 32. | 36. |
| 16611 | 32. | 34. | 31. | 25. | 35. | 27. | 44. | 27. | 35. | 38. | 37. | 13. | 32. |
| 16612 | 25. | 31. | 35. | 28. | 25. | 32. | 28. | 26. | 23. | 32. | 33. | 30. | 23. |
| 16613 | 35. | 32. | 28. | 36. | 37. | 35. | 21. | 36. | 40. | 37. | 29. | 37. | 40. |
| 16614 | 32. | 32. | 26. | 32. | 35. | 34. | 24. | 33. | 35. | 38. | 26. | 29. | 36. |
| 16615 | 43. | 42. | 41. | b | 58. | 55. | 45. | 29. | 59. | b | 47. | 51. | b |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 1): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16501 P | 26. | 40. | 42. | 41. | 42. | 42. | 39. | 38. | 40. | 41. | 53. | 47. | 38. |
| 16502 P | 33. | 42. | 39. | 37. | 38. | 37. | 41. | 38. | 41. | 44. | 39. | 43. | 42. |
| 16503 P | 26. | 37. | 36. | 38. | 39. | 34. | 43. | 36. | 39. | 37. | 43. | 43. | 47. |
| 16504 P | 26. | 31. | 34. | 33. | 30. | 49. | 36. | 39. | 38. | 38. | 38. | 41. | 39. |
| 16505 P | 26. | 35. | 38. | 35. | 37. | 37. | 36. | 44. | 39. | 42. | 51. | 47. | 44. |
| 16506 P | 39. | 54. | 69. | a | 60. | 57. | 41. | 50. | 60. | 55. | 47. | 50. | a |
| 16508 P | 31. | 36. | 37. | 36. | 34. | 38. | 35. | 37. | 33. | 34. | 43. | 35. | 31. |
| 16509 P | 30. | 66. | 70. | a | a | 52. | a | 48. | 49. | a | 64. | 61. | 45. |
| 16510 P | 43. | 56. | 54. | 51. | 53. | 44. | 50. | 48. | 45. | 51. | 51. | 49. | 51. |
| 16513 P | 24. | 27. | 31. | 34. | 30. | 33. | 30. | 31. | 34. | 34. | 37. | 36. | 36. |
| 16514 P | 32. | 42. | 50. | 59. | 44. | 50. | 59. | 50. | 46. | 49. | 49. | 60. | 57. |
| 16515 P | 29. | 34. | 36. | 39. | 40. | 36. | 35. | 33. | 35. | 33. | 36. | 39. | 38. |
| 16516 P | 21. | 30. | 32. | 31. | 30. | 30. | 29. | 29. | 31. | 35. | 30. | 33. | 36. |
| 16519 P | 27. | 41. | 33. | 29. | 37. | 40. | 38. | 42. | 41. | 40. | 43. | 55. | 51. |
| 16521 P | 23. | 30. | 41. | 44. | 39. | 36. | 46. | 37. | 37. | 42. | 54. | 49. | 61. |
| 16522 P | 31. | 43. | 49. | 48. | 45. | 45. | 51. | 50. | 43. | 51. | 63. | 50. | 54. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B24 (PAGE 2): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | |
| 16501 P | 47. | 53. | 57. | 51. | 67. | 53. | 44. | 39. |
| 16502 P | 52. | 39. | 42. | 47. | 33. | 43. | 49. | 37. |
| 16503 P | 44. | 43. | 48. | 46. | 55. | 48. | 40. | 35. |
| 16504 P | 41. | 40. | 53. | 41. | 39. | 40. | 42. | 35. |
| 16505 P | 42. | 49. | 45. | 49. | 56. | 48. | 43. | 39. |
| 16506 P | 64. | 72. | 79. | a | a | 81. | a | 67. |
| 16508 P | 37. | 36. | 34. | 38. | 45. | 39. | 33. | 38. |
| 16509 P | a | 50. | 48. | 56. | 45. | 44. | 51. | 47. |
| 16510 P | 52. | 53. | 51. | 55. | 51. | 48. | 42. | 38. |
| 16513 P | 35. | 34. | 41. | 39. | 44. | 41. | 44. | 42. |
| 16514 P | a | 60. | 64. | 62. | 68. | 61. | 53. | 45. |
| 16515 P | 40. | 45. | 50. | 44. | 57. | 49. | 49. | 43. |
| 16516 P | 34. | 38. | 31. | 40. | 39. | 33. | 36. | 25. |
| 16519 P | 46. | 46. | 47. | 43. | 46. | 47. | 42. | 42. |
| 16521 P | 58. | 50. | 47. | 45. | 55. | 38. | 43. | 45. |
| 16522 P | 48. | 45. | 45. | a | 46. | 51. | 39. | 43. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B24 (PAGE 3): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16524 P | 37. | 31. | 44. | 38. | 32. | 36. | 37. | 32. | 34. | 46. | 38. | 38. | 36. |
| 16525 P | 37. | 45. | 43. | 51. | 52. | 43. | 52. | a | 42. | 58. | 58. | 52. | 62. |
| 16526 P | 33. | 37. | 48. | 41. | 47. | 53. | 44. | 48. | 56. | 54. | 51. | 61. | 55. |
| 16528 P | 51. | 46. | 44. | 35. | 53. | 54. | 41. | 46. | 41. | 42. | 46. | 51. | 43. |
| 16529 P | 32. | 40. | 40. | 54. | 40. | 39. | 47. | 36. | 43. | 45. | 40. | 45. | 44. |
| 16531 P | 32. | 33. | 39. | 41. | 37. | 38. | 39. | 35. | 41. | 42. | 43. | 43. | 42. |
| 16532 P | a | 39. | a | a | 56. | a | a | 46. | a | a | a | a | a |
| 16535 P | 34. | 39. | 39. | 38. | 39. | 42. | 28. | 40. | 45. | 36. | 55. | 46. | 40. |
| 16536 P | 20. | 29. | 24. | 26. | 26. | 25. | 23. | 24. | 27. | 23. | 29. | 25. | 26. |
| 16539 P | 26. | 32. | 29. | 30. | 32. | 32. | 32. | 30. | 33. | 37. | 36. | 36. | 37. |
| 16540 P | 30. | 31. | 35. | 38. | 35. | 34. | 31. | 37. | 34. | 39. | 36. | 37. | 39. |
| 16541 P | 38. | 35. | 35. | 26. | 17. | 20. | 27. | 24. | 31. | 37. | 23. | 39. | 33. |
| 16542 P | 40. | 36. | 51. | 48. | 54. | 50. | 44. | 43. | 45. | 52. | 47. | 44. | 45. |
| 16544 P | 31. | 32. | 33. | 38. | 36. | 36. | 38. | 36. | 32. | 36. | 40. | 39. | 36. |
| 16545 P | 14. | 50. | 52. | 53. | 48. | 45. | 50. | 55. | 47. | 50. | 54. | 57. | 55. |
| 16546 P | 35. | 41. | 62. | 50. | 51. | 45. | 55. | 47. | 54. | 62. | a | 62. | 63. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B24 (PAGE 4): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | |
| 16524 P | 41. | 34. | 35. | 43. | 49. | 38. | 45. | 56. |
| 16525 P | 51. | 52. | 51. | 53. | 57. | 48. | 39. | 38. |
| 16526 P | 53. | 55. | 56. | a | 58. | 60. | 62. | 55. |
| 16528 P | 44. | 59. | 47. | 55. | 56. | 65. | 51. | 46. |
| 16529 P | 41. | 42. | 48. | 44. | 52. | 46. | 44. | 52. |
| 16531 P | 43. | 41. | 48. | 45. | 54. | 53. | 46. | 52. |
| 16532 P | a | a | a | a | a | a | a | a |
| 16535 P | 53. | 51. | 54. | 58. | 52. | 44. | 50. | 45. |
| 16536 P | 29. | 28. | 32. | 31. | 31. | 36. | 37. | 28. |
| 16539 P | 37. | 39. | 45. | 51. | 45. | 46. | 46. | 36. |
| 16540 P | 33. | 38. | 46. | 43. | 40. | 39. | 37. | 35. |
| 16541 P | 41. | 44. | 43. | 52. | 51. | 46. | 44. | 37. |
| 16542 P | 46. | 51. | 61. | 62. | 61. | 56. | 46. | 58. |
| 16544 P | 36. | 40. | 43. | 44. | 42. | 46. | 38. | 39. |
| 16545 P | 61. | 71. | 33. | 47. | 51. | 49. | 46. | 44. |
| 16546 P | 54. | 60. | 62. | 52. | a | 47. | 49. | 51. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 5): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16547 P | 42. | 36. | 42. | 46. | 50. | 44. | 55. | 45. | 51. | 55. | 50. | 45. | 48. |
| 16548 P | 32. | 33. | 41. | 38. | 39. | 38. | 43. | 38. | 43. | 57. | 53. | 42. | 64. |
| 16550 P | 57. | 57. | 57. | a | 48. | 60. | 59. | 50. | 46. | 60. | 51. | 61. | 55. |
| 16552 P | 39. | 38. | 42. | 53. | 44. | 52. | 62. | 49. | 50. | 62. | 57. | 64. | 61. |
| 16553 P | 34. | 48. | 47. | 50. | 56. | 57. | 53. | 63. | 54. | 49. | 61. | a | a |
| 16554 P | 32. | 39. | 42. | 40. | 42. | 50. | 54. | 49. | 43. | 45. | 48. | 52. | 48. |
| 16555 P | 29. | 32. | 47. | 43. | 42. | 41. | 44. | 44. | 47. | 51. | 50. | 52. | 55. |
| 16557 P | 28. | 39. | 38. | 36. | 41. | 44. | 41. | 36. | 47. | 44. | 53. | 42. | a |
| 16559 P | 41. | 43. | 47. | 49. | 49. | 48. | 57. | 56. | 53. | 57. | 63. | 63. | a |
| 16560 P | 40. | 50. | 51. | a | a | a | a | a | a | a | a | a | a |
| 16561 P | 30. | 39. | 35. | 44. | 42. | 55. | 46. | 44. | 61. | 49. | 59. | 62. | 58. |
| 16562 P | 37. | 34. | 34. | 41. | 38. | 41. | 38. | 42. | 44. | 35. | 41. | 42. | 44. |
| 16563 P | 24. | 34. | 32. | 35. | 42. | 35. | 35. | 39. | 39. | 40. | 39. | 42. | 43. |
| 16565 P | 38. | 40. | 47. | 45. | 48. | 49. | 45. | 43. | 47. | 51. | 56. | 56. | 65. |
| 16566 P | 29. | 39. | 34. | 40. | 41. | 41. | a | 49. | 45. | 47. | 58. | 54. | 52. |
| 16567 P | 26. | 28. | 32. | 32. | 33. | 32. | 36. | 34. | 33. | 35. | 33. | 33. | 35. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 6): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | |
| 16547 P | 46. | 51. | 55. | 50. | 61. | 51. | 43. | 46. |
| 16548 P | 56. | 53. | 53. | 53. | 51. | 51. | 49. | 56. |
| 16550 P | 61. | 57. | 59. | a | 58. | 62. | 69. | 78. |
| 16552 P | 47. | 58. | 58. | 53. | 53. | 63. | 42. | 45. |
| 16553 P | 54. | a | a | a | 72. | a | a | 65. |
| 16554 P | 58. | 58. | 58. | a | 55. | 57. | 59. | 50. |
| 16555 P | 68. | 48. | 63. | 48. | 61. | 56. | 55. | 69. |
| 16557 P | 39. | a | 63. | 60. | 62. | 55. | 77. | 42. |
| 16559 P | a | a | 61. | 60. | a | 64. | 68. | 70. |
| 16560 P | a | a | a | a | a | a | a | a |
| 16561 P | 59. | 56. | 63. | a | 57. | 55. | 48. | 38. |
| 16562 P | 44. | 43. | 42. | 44. | 39. | 44. | 37. | 40. |
| 16563 P | 39. | 42. | 54. | 51. | 63. | 55. | 44. | 35. |
| 16565 P | 56. | a | 63. | a | 59. | 50. | 51. | 39. |
| 16566 P | 33. | 36. | 66. | 57. | 53. | 57. | 45. | 35. |
| 16567 P | 33. | 42. | 36. | 40. | 44. | 39. | 41. | 41. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 7): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16570 P | 35. | 27. | 40. | 49. | 36. | 34. | 43. | 35. | 48. | 61. | 52. | 54. | 46. |
| 16571 P | 35. | 44. | 43. | 42. | 44. | 41. | 47. | 42. | 42. | 41. | 56. | 57. | 59. |
| 16574 P | 32. | 36. | 35. | 39. | 40. | 39. | 35. | 42. | 41. | 43. | 49. | 47. | 49. |
| 16575 P | 34. | 34. | 39. | 42. | 45. | 42. | 42. | 43. | 40. | 47. | 56. | 52. | 53. |
| 16576 P | 33. | 36. | 39. | 35. | 37. | 36. | 36. | 31. | 38. | 32. | 38. | 42. | 42. |
| 16577 P | 40. | 43. | 41. | 43. | 43. | 41. | 45. | 41. | 42. | 47. | 37. | 44. | 38. |
| 16578 P | 27. | 33. | 31. | 32. | 34. | 29. | 35. | 28. | 35. | 27. | 33. | 36. | 35. |
| 16579 P | 27. | 25. | 37. | 36. | 35. | 33. | 29. | 34. | 36. | 42. | 46. | 45. | 43. |
| 16580 P | 40. | 50. | a | 51. | a | 42. | 43. | 78. | 49. | 51. | a | a | a |
| 16581 P | 33. | 45. | 55. | 44. | 40. | 41. | 42. | 44. | 38. | 43. | 57. | 49. | 56. |
| 16582 P | 27. | 34. | 37. | 53. | 42. | 41. | 36. | 38. | 38. | 42. | 52. | 46. | 47. |
| 16583 P | 42. | 38. | 48. | 43. | 44. | 41. | 45. | 38. | 42. | 52. | 51. | 54. | 50. |
| 16584 P | 33. | 44. | 49. | 44. | 50. | 47. | 51. | 46. | a | a | 64. | a | a |
| 16587 P | a | a | 57. | a | a | 54. | 42. | 61. | 60. | 70. | a | 63. | a |
| 16589 P | 37. | a | 50. | a | a | a | a | a | a | a | a | a | a |
| 16592 P | 29. | 39. | 44. | 43. | 45. | 45. | 47. | 43. | 43. | 44. | 45. | 45. | 50. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 8): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | |
| 16570 P | 58. | 47. | a | 55. | 64. | 50. | 39. | 40. |
| 16571 P | 49. | 53. | 55. | 58. | 64. | 62. | 55. | 39. |
| 16574 P | 48. | 46. | 51. | 41. | 50. | 53. | 53. | 44. |
| 16575 P | 50. | 57. | 55. | 56. | 47. | 45. | 36. | 44. |
| 16576 P | 37. | 42. | 42. | 40. | 46. | 37. | 40. | 31. |
| 16577 P | 40. | 31. | 47. | 42. | 47. | 42. | 57. | 53. |
| 16578 P | 29. | 38. | 36. | 42. | 33. | 29. | 40. | 17. |
| 16579 P | 43. | 46. | 45. | 49. | 46. | 47. | 37. | 37. |
| 16580 P | a | a | 51. | 67. | a | 53. | 48. | 43. |
| 16581 P | 64. | 58. | 54. | 66. | a | 58. | 48. | 43. |
| 16582 P | 43. | 43. | 50. | 48. | 42. | 59. | 55. | 42. |
| 16583 P | 57. | 55. | 42. | 49. | 54. | 44. | 44. | 48. |
| 16584 P | 67. | a | a | a | a | 67. | a | 66. |
| 16587 P | a | a | a | 63. | 69. | 61. | 55. | 53. |
| 16589 P | a | a | 72. | a | a | a | a | 77. |
| 16592 P | 48. | 50. | 56. | 60. | 61. | 59. | 41. | 43. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 9): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16593 P | 24. | 27. | 34. | 32. | 35. | 33. | 29. | 34. | 33. | 40. | 53. | 51. | 46. |
| 16594 P | 44. | 53. | a | 49. | 51. | 45. | 46. | 47. | 47. | 46. | 57. | 55. | 50. |
| 16596 P | 40. | 41. | 38. | 47. | 43. | 42. | 41. | 38. | 45. | 42. | 42. | 44. | 49. |
| 16597 P | 31. | 34. | 40. | 33. | 30. | 38. | 33. | 30. | 30. | 35. | 37. | 43. | 44. |
| 16598 P | 36. | 40. | 42. | 39. | 44. | 34. | 40. | 47. | 46. | 47. | 48. | 43. | 44. |
| 16600 P | 30. | 31. | 38. | 36. | 33. | 33. | 32. | 34. | 30. | 34. | 37. | 39. | 35. |
| 16601 P | 32. | 41. | 40. | 36. | 45. | 43. | 39. | 38. | 42. | 39. | 43. | 40. | 47. |
| 16602 P | 54. | a | 82. | 70. | a | 47. | 60. | 51. | 50. | 49. | 79. | 52. | 46. |
| 16605 P | 40. | 45. | 44. | 42. | 49. | 43. | 50. | 38. | 44. | 41. | 59. | 46. | 48. |
| 16606 P | 40. | 41. | 46. | 45. | 39. | 51. | 44. | 40. | 64. | 49. | 73. | a | 55. |
| 16608 P | 23. | 35. | 41. | 46. | 39. | 41. | 42. | 39. | 41. | 37. | 50. | 46. | 55. |
| 16609 P | 33. | 36. | 34. | 37. | 39. | 33. | 40. | 39. | 40. | 41. | 50. | 47. | 48. |
| 16610 P | 36. | 46. | 49. | 54. | 46. | 48. | 45. | 50. | 47. | 45. | 48. | 61. | 54. |
| 16611 P | 37. | 41. | 50. | 54. | 48. | 46. | 51. | 48. | 46. | 49. | 55. | 58. | 59. |
| 16613 P | 42. | 48. | 44. | 33. | 65. | 49. | 44. | 58. | 50. | 52. | 58. | 56. | 45. |
| 16614 P | 34. | 47. | 47. | 44. | 45. | 42. | 39. | 43. | 39. | 46. | 53. | 50. | 48. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B24 (PAGE 10): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | |
| 16593 P | 39. | 39. | 48. | 55. | 52. | 46. | 34. | 34. |
| 16594 P | 46. | 49. | 57. | 56. | 58. | 55. | 46. | 33. |
| 16596 P | 45. | 46. | 55. | 57. | 65. | 50. | 50. | 53. |
| 16597 P | 36. | 44. | 46. | 46. | 40. | 43. | 35. | 36. |
| 16598 P | 42. | 47. | 50. | 53. | 47. | 43. | 37. | 37. |
| 16600 P | 38. | 36. | 41. | 48. | 43. | 51. | 41. | 32. |
| 16601 P | 41. | 44. | 49. | 45. | 47. | 11. | 42. | 31. |
| 16602 P | 54. | a | a | 58. | 64. | 58. | 53. | 56. |
| 16605 P | 53. | 52. | 47. | 50. | 53. | 52. | 48. | 42. |
| 16606 P | 58. | 60. | a | 67. | 65. | 63. | 44. | 46. |
| 16608 P | 43. | 53. | 44. | 45. | 42. | 48. | 39. | 24. |
| 16609 P | 43. | 36. | 45. | 43. | 57. | 48. | a | 39. |
| 16610 P | 57. | 58. | 63. | 52. | 55. | 60. | 55. | 63. |
| 16611 P | 57. | 64. | a | a | a | 65. | 63. | 56. |
| 16613 P | 52. | 47. | 53. | 45. | 43. | 57. | 39. | 41. |
| 16614 P | 53. | 49. | 61. | 55. | 53. | 57. | 47. | 50. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE B25 (PAGE 1): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16501 | 16. | 17. | 16. | 15. | 16. | 19. | 16. | 14. | 25. | 16. | 19. | 16. | 16. |
| 16502 | 14. | 21. | 21. | 19. | 13. | 20. | 22. | 19. | 15. | 18. | 21. | 20. | 14. |
| 16503 | 19. | 19. | 19. | 42. | b | 19. | 18. | 12. | 19. | 18. | 20. | 14. | 15. |
| 16504 | 17. | 18. | 20. | 16. | 15. | 19. | 19. | 27. | 18. | 20. | 18. | 22. | 16. |
| 16505 | 18. | 18. | 15. | 19. | 18. | 20. | 14. | 16. | 20. | 18. | 16. | 18. | 17. |
| 16506 | 19. | 21. | 20. | 16. | 19. | 20. | 20. | 11. | 11. | 14. | 18. | 14. | 15. |
| 16507 | 14. | 20. | 17. | 21. | 16. | 20. | 19. | 18. | 15. | 19. | 21. | 22. | 15. |
| 16508 | 18. | 19. | 12. | 18. | 19. | 16. | 15. | 15. | 18. | 15. | 16. | 17. | 19. |
| 16509 | 14. | 15. | 16. | 15. | 19. | 15. | 15. | 15. | 13. | 14. | 18. | 16. | 13. |
| 16510 | 20. | 21. | 21. | 16. | 21. | 23. | 19. | 19. | 22. | 19. | 26. | 18. | 20. |
| 16511 | 15. | 19. | 18. | 17. | 14. | 19. | 17. | 18. | 13. | 18. | 20. | 18. | 14. |
| 16512 | 18. | 17. | 18. | 14. | 18. | 18. | 17. | 13. | 17. | 19. | 17. | 11. | 20. |
| 16513 | 12. | 15. | 19. | 18. | 12. | 15. | 17. | 15. | 13. | 16. | 18. | 18. | 12. |
| 16514 | 17. | 20. | 19. | 17. | 17. | 19. | 9. | 11. | 10. | 18. | 22. | 19. | 17. |
| 16515 | 21. | 17. | 20. | 20. | 20. | 17. | 20. | 19. | 18. | 17. | 18. | 22. | 19. |
| 16516 | 16. | 19. | 17. | 12. | 17. | 17. | 19. | 14. | 17. | 17. | 18. | 14. | 16. |
| 16517 | 11. | 15. | 15. | 16. | 11. | 17. | 16. | 15. | 12. | 15. | 16. | 14. | 10. |
| 16518 | 13. | 19. | 20. | 20. | 14. | 19. | 21. | 17. | 13. | 18. | 21. | 18. | 12. |
| 16519 | 22. | 18. | 14. | 18. | 21. | 19. | 13. | 19. | 19. | 16. | 15. | 16. | 19. |
| 16520 | 20. | 19. | 18. | 13. | 18. | 21. | 17. | 15. | 18. | 18. | 18. | 16. | 17. |
| 16521 | 23. | 22. | 22. | 16. | 26. | 22. | 21. | 14. | 20. | 20. | 19. | 19. | 22. |
| 16522 | 21. | 22. | 18. | 14. | 24. | 23. | 20. | 13. | 23. | 21. | 22. | 13. | 22. |
| 16523 | 14. | 18. | 18. | 17. | 15. | 19. | 17. | 17. | 14. | 17. | 19. | 18. | 12. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Soiled feed precluded the calculation of this value.

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TABLE B25 (PAGE 2): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16524 | 16. | 17. | 17. | 16. | 33. | 43. | 17. | 12. | 16. | 18. | 17. | 15. | 16. |
| 16525 | 21. | 21. | 20. | 17. | 21. | 24. | 21. | 16. | 20. | 22. | 24. | 17. | 19. |
| 16526 | 22. | 19. | 20. | 18. | 17. | 23. | 19. | 18. | 14. | 19. | 22. | 21. | 12. |
| 16527 | 22. | 20. | 17. | 20. | 22. | 22. | 26. | 20. | 18. | 21. | 23. | 20. | 23. |
| 16528 | 17. | 16. | 12. | 16. | 18. | 18. | 11. | 16. | 18. | 17. | 16. | 16. | 18. |
| 16529 | 20. | 20. | 20. | 14. | 21. | 20. | 18. | 15. | 20. | 21. | 22. | 17. | 21. |
| 16530 | 20. | 18. | 16. | 19. | 19. | 20. | 16. | 17. | 19. | 19. | 19. | 18. | 11. |
| 16531 | 21. | 19. | 19. | 16. | 24. | 23. | 18. | 15. | 19. | 19. | 21. | 16. | 18. |
| 16532 | 17. | 21. | 19. | 18. | 17. | 20. | 21. | 18. | 16. | 20. | 21. | 17. | 17. |
| 16533 | 14. | 20. | 19. | 19. | 17. | 19. | 21. | 19. | 15. | 21. | 22. | 20. | 15. |
| 16534 | 16. | 17. | 19. | 18. | 13. | 20. | 20. | 19. | 14. | 19. | 20. | 21. | 13. |
| 16535 | 21. | 21. | 18. | 17. | 14. | 24. | 20. | 20. | 17. | 12. | 22. | 21. | 17. |
| 16536 | 18. | 17. | 14. | 16. | 18. | 17. | 11. | 15. | 18. | 16. | 12. | 18. | 17. |
| 16537 | 20. | 18. | 18. | 19. | 15. | 21. | 18. | 17. | 16. | 17. | 19. | 19. | 14. |
| 16538 | 20. | 23. | 24. | 25. | 2. | 20. | 24. | 25. | 24. | 23. | 19. | 23. | 23. |
| 16539 | 17. | 16. | 17. | 17. | 40. | 17. | 18. | 17. | 15. | 17. | 17. | 19. | 16. |
| 16540 | 20. | 17. | 12. | 16. | b | 17. | 13. | 16. | 17. | 16. | 14. | 17. | 17. |
| 16541 | 19. | 15. | 20. | 18. | 55. | 14. | 20. | 20. | 27. | 14. | 20. | 18. | 18. |
| 16542 | 17. | 20. | 19. | 14. | 22. | 20. | 18. | 15. | 20. | 21. | 19. | 17. | 20. |
| 16543 | 14. | 20. | 21. | 19. | 18. | 22. | 24. | 22. | 15. | 20. | 20. | 19. | 14. |
| 16544 | 17. | 14. | 12. | 15. | 14. | 17. | 12. | 14. | 15. | 16. | 16. | 14. | 15. |
| 16545 | 25. | 22. | 21. | 16. | 24. | 26. | 23. | 17. | 25. | 25. | 56. | 18. | 22. |
| 16546 | 20. | 20. | 18. | 18. | 21. | 19. | 19. | 16. | 20. | 19. | 20. | 17. | 18. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Soiled feed precluded the calculation of this value.

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TABLE B25 (PAGE 3): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16547 | 19. | 21. | 16. | 13. | 20. | 22. | 16. | 13. | 17. | 18. | 21. | 14. | 18. |
| 16548 | 21. | 24. | 20. | 17. | 21. | 26. | 20. | 17. | 20. | 19. | 22. | 19. | 19. |
| 16549 | 19. | 18. | 20. | 14. | 21. | 24. | 19. | 17. | 17. | 19. | 23. | 19. | 15. |
| 16550 | 16. | 18. | 20. | 18. | 17. | 19. | 19. | 19. | 15. | 18. | 22. | 19. | 24. |
| 16551 | 19. | 21. | 19. | 15. | 21. | 23. | 20. | 17. | 18. | 21. | 21. | 17. | 18. |
| 16552 | 22. | 20. | 21. | 15. | 22. | 25. | 19. | 12. | 20. | 21. | 21. | 15. | 16. |
| 16553 | 12. | 20. | 19. | 17. | 14. | 20. | 21. | 17. | 14. | 20. | 21. | 18. | 13. |
| 16554 | 19. | 17. | 18. | 19. | 19. | 19. | 20. | 19. | 16. | 17. | 22. | 20. | 14. |
| 16555 | 16. | 14. | 16. | 14. | 15. | 17. | 16. | 13. | 16. | 17. | 17. | 13. | 14. |
| 16556 | 23. | 19. | 15. | 20. | 20. | 22. | 18. | 18. | 21. | 18. | 20. | 21. | 20. |
| 16557 | 20. | 20. | 16. | 16. | 14. | 20. | 18. | 19. | 16. | 15. | 18. | 20. | 19. |
| 16558 | 18. | 20. | 20. | 16. | 18. | 23. | 20. | 15. | 19. | 19. | 21. | 14. | 18. |
| 16559 | 23. | 21. | 21. | 16. | 32. | 25. | 22. | 16. | 21. | 21. | 29. | 20. | 21. |
| 16560 | 16. | 13. | 16. | 17. | 18. | 11. | 16. | 17. | 15. | 13. | 17. | 18. | 20. |
| 16561 | 22. | 18. | 18. | 22. | 23. | 24. | 18. | 22. | 22. | 22. | 23. | 20. | 18. |
| 16562 | 15. | 14. | 18. | 20. | 14. | 18. | 17. | 18. | 14. | 18. | 17. | 18. | 14. |
| 16563 | 12. | 15. | 16. | 16. | 16. | 12. | 16. | 18. | 17. | 12. | 13. | 15. | 18. |
| 16564 | 15. | 18. | 19. | 20. | 15. | 19. | 21. | 18. | 18. | 20. | 21. | 20. | 14. |
| 16565 | 18. | 16. | 16. | 18. | 18. | 16. | 15. | 19. | 18. | 14. | 16. | 19. | 15. |
| 16566 | 21. | 20. | 16. | 18. | 22. | 24. | 16. | 21. | 22. | 22. | 19. | 21. | 21. |
| 16567 | 19. | 15. | 18. | 15. | 18. | 18. | 16. | 15. | 18. | 16. | 18. | 13. | 19. |
| 16568 | 19. | 18. | 16. | 15. | 17. | 20. | 13. | 15. | 16. | 18. | 18. | 16. | 17. |
| 16569 | 14. | 18. | 19. | 17. | 15. | 19. | 16. | 16. | 13. | 18. | 19. | 18. | 14. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

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TABLE B25 (PAGE 4): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16570 | 9. | 18. | 18. | 15. | 15. | 12. | 17. | 17. | 19. | 14. | 14. | 15. | 17. |
| 16571 | 21. | 18. | 21. | 24. | 20. | 21. | 16. | 20. | 19. | 26. | 25. | 19. | 20. |
| 16572 | 17. | 19. | 21. | 20. | 20. | 22. | 20. | 18. | 17. | 20. | 22. | 20. | 13. |
| 16573 | 16. | 18. | 20. | 18. | 15. | 20. | 18. | 17. | 15. | 19. | 18. | 19. | 18. |
| 16574 | 18. | 18. | 15. | 17. | 18. | 20. | 16. | 16. | 20. | 16. | 17. | 18. | 15. |
| 16575 | 19. | 18. | 19. | b | 34. | b | 18. | 20. | 19. | 14. | 20. | 19. | 19. |
| 16576 | 17. | 14. | 17. | 16. | 16. | 18. | 17. | 19. | 17. | 16. | 19. | 19. | 15. |
| 16577 | 18. | 19. | 17. | 14. | 19. | 18. | 18. | 12. | 10. | 25. | 19. | 17. | 19. |
| 16578 | 16. | 13. | 17. | 18. | 15. | 15. | 16. | 17. | 16. | 13. | 20. | 17. | 15. |
| 16579 | 23. | 24. | 21. | 18. | 25. | 27. | 22. | 17. | 22. | 23. | 33. | 20. | 21. |
| 16580 | 22. | 20. | 18. | 15. | 70. | 23. | 18. | 15. | 21. | 22. | 18. | 17. | 20. |
| 16581 | 21. | 20. | 18. | 19. | c | 24. | 19. | 16. | 19. | 17. | 18. | 22. | 16. |
| 16582 | 20. | 19. | 14. | 19. | 18. | 17. | 12. | 16. | 19. | 17. | 13. | 17. | 17. |
| 16583 | 20. | 21. | 19. | 14. | 20. | 22. | 22. | 16. | 20. | 22. | 21. | 15. | 18. |
| 16584 | 18. | 13. | 20. | 19. | 19. | 16. | 20. | 20. | 20. | 18. | 19. | 22. | 19. |
| 16585 | 16. | 22. | 22. | 21. | 18. | 23. | 24. | 19. | 17. | 19. | 22. | 20. | 15. |
| 16586 | 15. | 18. | 18. | 17. | 16. | 18. | 19. | 19. | 14. | 19. | 20. | 16. | 16. |
| 16587 | 20. | 19. | 19. | 15. | 22. | 22. | 20. | 15. | 21. | 22. | 22. | 15. | 22. |
| 16588 | 21. | 19. | 16. | 19. | 22. | 21. | 11. | 17. | 20. | 20. | 12. | 18. | 9. |
| 16589 | 22. | 21. | 20. | 17. | 21. | 24. | 21. | 18. | 21. | 22. | 21. | 19. | 21. |
| 16590 | 15. | 18. | 19. | 14. | 14. | 20. | 16. | 17. | 15. | 18. | 19. | 17. | 14. |
| 16591 | 16. | 20. | 20. | 18. | 20. | 20. | 20. | 19. | 17. | 17. | 20. | 19. | 16. |
| 16592 | 20. | 20. | 19. | 13. | 22. | 18. | 18. | 15. | 17. | 20. | 20. | 13. | 17. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Wet feed precluded the calculation of this value.

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TABLE B25 (PAGE 5): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - PART A

| DAYS | 1- 2 | 2- 3 | 3- 4 | 4- 5 | 5- 6 | 6- 7 | 7- 8 | 8- 9 | 9- 10 | 10- 11 | 11- 12 | 12- 13 | 13- 14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16593 | 17. | 13. | 19. | 13. | 22. | 19. | 18. | 18. | 20. | 18. | 17. | 18. | 19. |
| 16594 | 17. | 22. | 22. | 20. | 16. | 16. | 23. | 22. | 26. | 17. | 24. | 20. | 21. |
| 16595 | 29. | 22. | 19. | 15. | 22. | 21. | 22. | 14. | 25. | 21. | 22. | 18. | 16. |
| 16596 | 23. | 22. | 24. | 23. | 21. | 25. | 22. | 16. | 20. | 20. | 18. | 12. | 18. |
| 16597 | 15. | 12. | 15. | 15. | 16. | 12. | 15. | 15. | 16. | 11. | 16. | 15. | 14. |
| 16598 | 17. | 20. | 23. | 19. | 18. | 19. | 20. | 18. | 21. | 16. | 18. | 19. | 18. |
| 16599 | 18. | 20. | 17. | 21. | 17. | 20. | 17. | 14. | 18. | 17. | 18. | 14. | 17. |
| 16600 | 19. | 18. | 18. | 15. | 16. | 22. | 15. | 13. | 17. | 20. | 19. | 14. | 14. |
| 16601 | 16. | 13. | 16. | 19. | b | b | 16. | 17. | 17. | 12. | 18. | 18. | 15. |
| 16602 | 21. | 22. | 22. | 17. | 22. | 26. | 17. | 18. | 22. | 21. | 22. | 18. | 21. |
| 16603 | 24. | 25. | 24. | 24. | 26. | 26. | 26. | 15. | 16. | 22. | 22. | 23. | 15. |
| 16604 | 19. | 18. | 23. | 20. | 21. | 21. | 18. | 17. | 20. | 19. | 20. | 18. | 18. |
| 16605 | 18. | 17. | 16. | 14. | 17. | 21. | 16. | 15. | 18. | 19. | 19. | 15. | 14. |
| 16606 | 19. | 16. | 15. | 17. | 20. | 20. | 9. | 18. | 20. | 19. | 16. | 19. | 20. |
| 16607 | 18. | 21. | 20. | 18. | 17. | 22. | 25. | 19. | 17. | 19. | 22. | 19. | 16. |
| 16608 | 21. | 18. | 22. | 22. | 19. | 17. | 20. | 21. | 23. | 15. | 20. | 21. | 17. |
| 16609 | 19. | 17. | 14. | 19. | 21. | 20. | 14. | 18. | 20. | 19. | 15. | 19. | 20. |
| 16610 | 21. | 21. | 20. | 17. | 18. | 21. | 23. | 19. | 19. | 16. | 22. | 21. | 21. |
| 16611 | 18. | 18. | 17. | 13. | 18. | 18. | 16. | 13. | 17. | 19. | 18. | 13. | 20. |
| 16612 | 15. | 20. | 19. | 17. | 16. | 22. | 19. | 18. | 15. | 18. | 21. | 18. | 13. |
| 16613 | 18. | 16. | 12. | 18. | 22. | 19. | 12. | 19. | 21. | 18. | 13. | 19. | 19. |
| 16614 | 24. | 23. | 19. | 22. | 27. | 24. | 18. | 21. | 24. | 23. | 18. | 21. | 23. |
| 16615 | 27. | 25. | 22. | 21. | 29. | 25. | 24. | 18. | 26. | 28. | 24. | 22. | 22. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.

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TABLE B26 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16501 P | 19. | 19. | 20. | 21. | 20. | 20. | 24. | 21. | 21. | 23. | 24. | 22. | 23. |
| 16502 P | 21. | 26. | 23. | 23. | 20. | 21. | 24. | 24. | 24. | 25. | 21. | 27. | 24. |
| 16503 P | 20. | 23. | 21. | 24. | 24. | 23. | 24. | 26. | 26. | 24. | 24. | 26. | 24. |
| 16504 P | 19. | 20. | 21. | 22. | 17. | 24. | 20. | 24. | 24. | 20. | 24. | 22. | 22. |
| 16505 P | 19. | 22. | 21. | 19. | 21. | 20. | 21. | 21. | 24. | 23. | 24. | 27. | 20. |
| 16506 P | 23. | 26. | 25. | 27. | 28. | 26. | 23. | 32. | 28. | 27. | 22. | 27. | 26. |
| 16508 P | 20. | 22. | 22. | 22. | 21. | 23. | 22. | 23. | 21. | 24. | 22. | 24. | 22. |
| 16509 P | 17. | 18. | 22. | 19. | 22. | 20. | 19. | 22. | 22. | 22. | 22. | 20. | 20. |
| 16510 P | 23. | 21. | 24. | 23. | 23. | 25. | 22. | 27. | 24. | 27. | 27. | 21. | 24. |
| 16513 P | 18. | 19. | 20. | 21. | 20. | 24. | 20. | 22. | 23. | 21. | 24. | 25. | 23. |
| 16514 P | 19. | 24. | 19. | 20. | 23. | 22. | 23. | 24. | 23. | 24. | 22. | 28. | 24. |
| 16515 P | 21. | 21. | 21. | 19. | 20. | 23. | 21. | 21. | 22. | 20. | 24. | 22. | 22. |
| 16516 P | 18. | 19. | 20. | 20. | 22. | 20. | 21. | 20. | 22. | 24. | 24. | 23. | 25. |
| 16519 P | 19. | 21. | 21. | 13. | 21. | 19. | 19. | 24. | 23. | 23. | 23. | 24. | 22. |
| 16521 P | 18. | 21. | 23. | 23. | 24. | 24. | 24. | 25. | 26. | 25. | 27. | 25. | 28. |
| 16522 P | 24. | 23. | 27. | 29. | 31. | 32. | 28. | 32. | 32. | 34. | 34. | 31. | 31. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B26 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | |
| 16501 P | 21. | 24. | 20. | 24. | 26. | 21. | 25. | 25. |
| 16502 P | 24. | 22. | 27. | 23. | 17. | 25. | 28. | 23. |
| 16503 P | 22. | 22. | 22. | 22. | 24. | 21. | 26. | 21. |
| 16504 P | 21. | 19. | 25. | 24. | 22. | 20. | 23. | 27. |
| 16505 P | 23. | 23. | 25. | 23. | 23. | 27. | 21. | 26. |
| 16506 P | 23. | 23. | 22. | 26. | 24. | 31. | 26. | 35. |
| 16508 P | 21. | 24. | 21. | 24. | 25. | 23. | 19. | 24. |
| 16509 P | 20. | 21. | 21. | 23. | 19. | 23. | 22. | 20. |
| 16510 P | 24. | 24. | 22. | 27. | 25. | 24. | 26. | 23. |
| 16513 P | 25. | 21. | 24. | 23. | 24. | 27. | 26. | 27. |
| 16514 P | 27. | 26. | 25. | 26. | 27. | 28. | 26. | 26. |
| 16515 P | 20. | 23. | 25. | 22. | 26. | 22. | 21. | 22. |
| 16516 P | 24. | 25. | 20. | 24. | 24. | 21. | 20. | 20. |
| 16519 P | 24. | 22. | 25. | 24. | 24. | 25. | 23. | 25. |
| 16521 P | 26. | 25. | 24. | 26. | 26. | 23. | 26. | 27. |
| 16522 P | 28. | 27. | 25. | 23. | 27. | 21. | 25. | 19. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B26 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16524 P | 19. | 15. | 21. | 19. | 20. | 19. | 21. | 21. | 22. | 22. | 22. | 22. | 24. |
| 16525 P | 24. | 22. | 25. | 26. | 27. | 27. | 28. | 29. | 33. | 27. | 29. | 27. | 30. |
| 16526 P | 21. | 24. | 26. | 25. | 24. | 29. | 26. | 28. | 29. | 28. | 30. | 32. | 26. |
| 16528 P | 18. | 22. | 21. | 23. | 24. | 25. | 22. | 24. | 25. | 25. | 26. | 25. | 23. |
| 16529 P | 25. | 29. | 29. | 29. | 33. | 30. | 33. | 28. | 35. | 32. | 30. | 31. | 30. |
| 16531 P | 23. | 22. | 22. | 22. | 23. | 25. | 24. | 23. | 23. | 25. | 24. | 22. | 22. |
| 16532 P | 23. | 22. | 26. | 23. | 23. | 25. | 25. | 24. | 27. | 26. | 24. | 28. | 25. |
| 16535 P | 24. | 24. | 27. | 26. | 27. | 25. | 25. | 31. | 24. | 26. | 29. | 37. | 22. |
| 16536 P | 19. | 22. | 20. | 22. | 23. | 21. | 19. | 21. | 23. | 22. | 22. | 21. | 22. |
| 16539 P | 19. | 5. | 22. | 22. | 23. | 22. | 23. | 21. | 25. | 24. | 23. | 24. | 25. |
| 16540 P | 22. | 21. | 23. | 22. | 22. | 22. | 21. | 25. | 22. | 25. | 22. | 24. | 23. |
| 16541 P | 21. | 18. | 20. | 19. | 12. | 11. | 16. | 19. | 20. | 18. | 15. | 23. | 20. |
| 16542 P | 20. | 42. | 23. | 24. | 23. | 36. | a | a | 24. | 36. | 39. | 21. | 22. |
| 16544 P | 18. | 19. | 20. | 18. | 18. | 18. | 18. | 20. | 17. | 23. | 20. | 23. | 21. |
| 16545 P | 15. | 27. | 28. | 26. | 23. | 24. | 27. | 28. | 29. | 30. | 29. | 28. | 27. |
| 16546 P | 22. | 24. | 24. | 25. | 26. | 24. | 27. | 21. | 25. | 29. | 24. | 25. | 25. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE B26 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | |
| 16524 P | 22. | 21. | 21. | 24. | 25. | 19. | 25. | 28. |
| 16525 P | 27. | 26. | 23. | 26. | 27. | 26. | 32. | 25. |
| 16526 P | 29. | 23. | 26. | 30. | 25. | 31. | 28. | 24. |
| 16528 P | 23. | 24. | 25. | 26. | 27. | 26. | 26. | 26. |
| 16529 P | 28. | 28. | 27. | 28. | 28. | 25. | 25. | 32. |
| 16531 P | 21. | 19. | 22. | 20. | 24. | 20. | 21. | 28. |
| 16532 P | 27. | 27. | 27. | 29. | 26. | 31. | 26. | 24. |
| 16535 P | 27. | 27. | 32. | 27. | 28. | 25. | 28. | 28. |
| 16536 P | 24. | 22. | 23. | 23. | 22. | 25. | 21. | 28. |
| 16539 P | 24. | 25. | 26. | 26. | 26. | 25. | 27. | 22. |
| 16540 P | 21. | 25. | 24. | 23. | 25. | 21. | 20. | 21. |
| 16541 P | 22. | 24. | 24. | 27. | 29. | 25. | 29. | 26. |
| 16542 P | 39. | 21. | 22. | 23. | 26. | 23. | 28. | 19. |
| 16544 P | 22. | 19. | 26. | 18. | 22. | 26. | 19. | 26. |
| 16545 P | 27. | 29. | 17. | 26. | 29. | 27. | 30. | 29. |
| 16546 P | 23. | 24. | 20. | 27. | 27. | 19. | 25. | 25. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 5): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16547 P | 20. | 24. | 26. | 27. | 21. | 25. | 27. | 28. | 29. | 28. | 29. | 31. | 29. |
| 16548 P | 22. | 24. | 28. | 27. | 29. | 25. | 30. | 25. | 25. | 27. | 30. | 23. | 30. |
| 16550 P | 23. | 23. | 24. | 25. | 24. | 26. | 25. | 27. | 25. | 26. | 24. | 27. | 27. |
| 16552 P | 24. | 23. | 24. | 30. | 25. | 25. | 29. | 26. | 24. | 29. | 30. | 26. | 25. |
| 16553 P | 23. | 25. | 24. | 23. | 24. | 23. | 24. | 27. | 27. | 22. | 27. | 24. | 27. |
| 16554 P | 20. | 23. | 22. | 23. | 19. | 24. | 22. | 23. | 23. | 22. | 23. | 25. | 23. |
| 16555 P | 16. | 19. | 16. | 21. | 19. | 18. | 18. | 20. | 22. | 21. | 21. | 20. | 16. |
| 16557 P | 18. | 25. | 21. | 23. | 20. | 20. | 23. | 23. | 23. | 23. | 26. | 26. | 26. |
| 16559 P | 22. | 25. | 23. | 27. | 25. | 24. | 26. | 26. | 30. | 28. | 29. | 26. | 28. |
| 16560 P | 20. | 23. | 18. | 21. | 20. | 22. | 20. | 19. | 20. | 26. | 23. | 29. | 21. |
| 16561 P | 16. | 22. | 22. | 22. | 22. | 25. | 23. | 27. | 23. | 29. | 28. | 31. | 29. |
| 16562 P | 18. | 21. | 17. | 27. | 21. | 21. | 21. | 25. | 23. | 22. | 22. | 23. | 22. |
| 16563 P | 17. | 19. | 18. | 20. | 18. | 20. | 20. | 19. | 20. | 22. | 18. | 23. | 22. |
| 16565 P | 22. | 21. | 22. | 22. | 22. | 22. | 23. | 21. | 25. | 23. | 23. | 24. | 25. |
| 16566 P | 23. | 21. | 24. | 25. | 25. | 24. | 21. | 28. | 24. | 26. | 27. | 28. | 23. |
| 16567 P | 18. | 21. | 21. | 20. | 21. | 21. | 20. | 21. | 21. | 23. | 22. | 21. | 23. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 6): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | |
| 16547 P | 27. | 28. | 28. | 27. | 26. | 24. | 26. | 28. |
| 16548 P | 28. | 26. | 27. | 25. | 33. | 27. | 28. | 24. |
| 16550 P | 25. | 25. | 26. | 28. | 25. | 28. | 26. | 25. |
| 16552 P | 22. | 27. | 26. | 26. | 26. | 24. | 30. | 21. |
| 16553 P | a | 25. | 25. | 28. | 23. | 34. | 30. | 32. |
| 16554 P | 22. | 24. | 21. | 23. | 24. | 23. | 22. | 22. |
| 16555 P | 23. | 21. | 23. | 24. | 22. | 21. | 24. | 22. |
| 16557 P | 23. | 24. | 23. | 27. | 21. | 25. | 25. | 22. |
| 16559 P | 25. | 28. | 25. | 25. | 30. | 21. | 27. | 28. |
| 16560 P | 24. | 22. | 26. | 30. | 29. | 29. | 25. | 21. |
| 16561 P | 29. | 29. | 32. | 30. | 29. | 33. | 24. | 24. |
| 16562 P | 20. | 19. | 22. | 22. | 22. | 25. | 24. | 26. |
| 16563 P | 20. | 21. | 24. | 23. | 27. | 24. | 21. | 19. |
| 16565 P | 21. | 23. | 23. | 27. | 25. | 21. | 24. | 23. |
| 16566 P | 19. | 24. | 26. | 23. | 29. | 24. | 24. | 27. |
| 16567 P | 20. | 22. | 19. | 22. | 23. | 21. | 20. | 25. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 7): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16570 P | 21. | 19. | 23. | 21. | 21. | 21. | 24. | 21. | 26. | 22. | 26. | 25. | 23. |
| 16571 P | 24. | 24. | 23. | 24. | 25. | 24. | 24. | 21. | 27. | 24. | 25. | 30. | 25. |
| 16574 P | 21. | 19. | 18. | 21. | 22. | 24. | 20. | 23. | 25. | 25. | 23. | 28. | 22. |
| 16575 P | 23. | 20. | 22. | 22. | 25. | 24. | 23. | 23. | 23. | 27. | 25. | 24. | 25. |
| 16576 P | 19. | 22. | 19. | 19. | 22. | 19. | 24. | 18. | 20. | 23. | 24. | 23. | 22. |
| 16577 P | 24. | 25. | 25. | 24. | 27. | 24. | 25. | 25. | 30. | 27. | 24. | 26. | 26. |
| 16578 P | 18. | 20. | 17. | 19. | 20. | 24. | 24. | 17. | 21. | 18. | 20. | 21. | 21. |
| 16579 P | 21. | 24. | 27. | 26. | 28. | 25. | 24. | 29. | 27. | 29. | 32. | 30. | 29. |
| 16580 P | 23. | 22. | 25. | 23. | 27. | 26. | 21. | 28. | 27. | 26. | 28. | 29. | 28. |
| 16581 P | 19. | 24. | 22. | 24. | 22. | 22. | 25. | 25. | 24. | 25. | 29. | 25. | 26. |
| 16582 P | 20. | 20. | 23. | 24. | 25. | 26. | 24. | 24. | 25. | 24. | 26. | 25. | 22. |
| 16583 P | 25. | 25. | 27. | 26. | 28. | 25. | 27. | 28. | 27. | 29. | 29. | 28. | 31. |
| 16584 P | 20. | 26. | 25. | 27. | 29. | 29. | 29. | 26. | 31. | 28. | 30. | 30. | 30. |
| 16587 P | 23. | 25. | 26. | 24. | 27. | 29. | 28. | 29. | 30. | 27. | 29. | 26. | 26. |
| 16589 P | 20. | 24. | 22. | 21. | 24. | 18. | 20. | 23. | 19. | 20. | 24. | 22. | 23. |
| 16592 P | 17. | 21. | 19. | 22. | 22. | 22. | 23. | 21. | 24. | 24. | 24. | 22. | 24. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 8): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | |
| 16570 P | 23. | 22. | 25. | 23. | 25. | 24. | 26. | 22. |
| 16571 P | 23. | 25. | 27. | 24. | 28. | 25. | 22. | 25. |
| 16574 P | 24. | 23. | 26. | 22. | 26. | 30. | 25. | 24. |
| 16575 P | 23. | 24. | 25. | 30. | 24. | 28. | 23. | 29. |
| 16576 P | 21. | 22. | 28. | 47. | 29. | 24. | 25. | 21. |
| 16577 P | 26. | 23. | 27. | 27. | 24. | 24. | 26. | 15. |
| 16578 P | 16. | 20. | 21. | 22. | 17. | 16. | 24. | 25. |
| 16579 P | 30. | 27. | 29. | 27. | 27. | 27. | 28. | 22. |
| 16580 P | 27. | 28. | 26. | 28. | 28. | 23. | 29. | 25. |
| 16581 P | 27. | 29. | 26. | 23. | 28. | 24. | 26. | 20. |
| 16582 P | 26. | 21. | 25. | 26. | 27. | 25. | 20. | 22. |
| 16583 P | 27. | 31. | 21. | 23. | 28. | 26. | 31. | 25. |
| 16584 P | 28. | 28. | 31. | 30. | 27. | 23. | 22. | 24. |
| 16587 P | 26. | 25. | 28. | 28. | 26. | 27. | 27. | 25. |
| 16589 P | 25. | 24. | 24. | 21. | 30. | 28. | 26. | 26. |
| 16592 P | 20. | 19. | 21. | 22. | 21. | 20. | 23. | 23. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 9): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16593 P | 18. | 19. | 21. | 22. | 21. | 24. | 22. | 23. | 23. | 24. | 26. | 26. | 26. |
| 16594 P | 26. | 26. | 25. | 26. | 28. | 27. | 27. | 25. | 27. | 26. | 27. | 27. | 24. |
| 16596 P | 22. | 21. | 22. | 24. | 24. | 23. | 21. | 19. | 25. | 23. | 25. | 22. | 27. |
| 16597 P | 17. | 20. | 17. | 17. | 19. | 19. | 20. | 21. | 17. | 19. | 22. | 19. | 27. |
| 16598 P | 21. | 23. | 23. | 24. | 24. | 21. | 22. | 24. | 23. | 25. | 28. | 22. | 24. |
| 16600 P | 20. | 20. | 22. | 23. | 22. | 21. | 25. | 21. | 25. | 22. | 24. | 21. | 23. |
| 16601 P | 21. | 39. | 22. | 20. | 20. | 23. | 22. | 21. | a | a | 25. | 26. | 25. |
| 16602 P | 24. | 27. | 23. | 28. | 27. | 20. | 23. | 24. | 21. | 24. | 27. | 21. | 24. |
| 16605 P | 20. | 23. | 22. | 23. | 24. | 23. | 27. | 24. | 26. | 25. | 27. | 23. | 24. |
| 16606 P | 22. | 22. | 22. | 22. | 21. | 23. | 22. | 22. | 22. | 25. | 27. | 24. | 25. |
| 16608 P | 18. | 26. | 25. | 25. | 24. | 26. | 27. | 24. | 27. | 25. | 27. | 27. | 28. |
| 16609 P | 22. | 24. | 23. | 24. | 24. | 25. | 24. | 23. | 25. | 26. | 25. | 25. | 25. |
| 16610 P | 22. | 23. | 25. | 25. | 25. | 26. | 28. | 26. | 26. | 28. | 25. | 31. | 29. |
| 16611 P | 19. | 22. | 21. | 23. | 22. | 22. | 23. | 23. | 24. | 26. | 24. | 25. | 28. |
| 16613 P | 21. | 20. | 23. | 21. | 22. | 21. | 22. | 25. | 22. | 24. | 22. | 26. | 22. |
| 16614 P | 22. | 24. | 25. | 27. | 27. | 29. | 27. | 27. | 24. | 29. | 29. | 31. | 30. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B26 (PAGE 10): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - PART A

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | |
| 16593 P | 26. | 28. | 23. | 30. | 28. | 24. | 25. | 20. |
| 16594 P | 24. | 25. | 29. | 25. | 25. | 27. | 23. | 24. |
| 16596 P | 26. | 22. | 27. | 23. | 29. | 23. | 28. | 20. |
| 16597 P | 15. | 20. | 22. | 21. | 24. | 21. | 24. | 23. |
| 16598 P | 24. | 23. | 25. | 25. | 25. | 25. | 28. | 24. |
| 16600 P | 22. | 23. | 22. | 25. | 24. | 24. | 30. | 23. |
| 16601 P | 20. | 25. | 24. | 26. | 24. | 6. | 15. | 15. |
| 16602 P | 25. | 26. | 25. | 22. | 30. | 25. | 22. | 28. |
| 16605 P | 19. | 24. | 17. | 24. | 23. | 20. | 19. | 20. |
| 16606 P | 23. | 26. | 27. | 26. | 28. | 25. | 24. | 25. |
| 16608 P | 25. | 27. | 26. | 26. | 24. | 28. | 24. | 17. |
| 16609 P | 24. | 21. | 22. | 25. | 26. | 25. | 21. | 24. |
| 16610 P | 25. | 26. | 32. | 31. | 30. | 32. | 23. | 27. |
| 16611 P | 26. | 24. | 22. | 30. | 27. | 24. | 24. | 24. |
| 16613 P | 21. | 22. | 25. | 24. | 25. | 24. | 22. | 25. |
| 16614 P | 31. | 29. | 32. | 32. | 30. | 36. | 26. | 32. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B27 (PAGE 1): CAESAREAN-SECTIONING OBSERVATIONS - INDIVIDUAL DATA - PART A

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| | | | VIABLE FETUSES | | | DEAD FETUSES | | | EARLY RESORPTIONS | | | LATE RESORPTIONS | | | IMPLANTATION SITES | | | CORPORA LUTEA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SEX | | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT OVARY | LEFT OVARY | TOTAL |
| RAT # | M | F | | | | | | | | | | | | | | | | | | |
| 16501 | 11 | 4 | 10 | 5 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 10 | 6 | 16 | 10 | 8 | 18 |
| 16502 | 6 | 8 | 2 | 12 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 12 | 15 | 3 | 12 | 15 |
| 16503 | 7 | 6 | 8 | 5 | 13 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 10 | 5 | 15 | 10 | 5 | 15 |
| 16504 | 7 | 7 | 7 | 7 | 14 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 8 | 15 | 10 | 12 | 22 |
| 16505 | 7 | 7 | 5 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 14 | 8 | 10 | 18 |
| 16506 | 6 | 6 | 6 | 6 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 6 | 13 | 11 | 8 | 19 |
| 16508 | 8 | 9 | 8 | 9 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 17 | 8 | 9 | 17 |
| 16509 | 7 | 7 | 8 | 6 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 6 | 15 | 9 | 7 | 16 |
| 16510 | 9 | 8 | 7 | 10 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 10 | 17 | 8 | 11 | 19 |
| 16513 | 8 | 7 | 7 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 15 | 7 | 9 | 16 |
| 16514 | 8 | 6 | 2 | 12 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 14 | 3 | 13 | 16 |
| 16515 | 7 | 8 | 9 | 6 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 10 | 6 | 16 | 13 | 6 | 19 |
| 16516 | 8 | 8 | 8 | 8 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 16 | 10 | 8 | 18 |
| 16519 | 5 | 10 | 6 | 9 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 9 | 15 | 8 | 9 | 17 |
| 16521 | 8 | 6 | 8 | 6 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 14 | 11 | 6 | 17 |
| 16522 | 7 | 11 | 12 | 6 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 6 | 18 | 16 | 7 | 23 |

M = MALE F = FEMALE
PLACENTAE APPEARED NORMAL UNLESS NOTED OTHERWISE.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B27 (PAGE 2): CAESAREAN-SECTIONING OBSERVATIONS - INDIVIDUAL DATA - PART A

DOSAGE GROUP II 0.01 MG/KG/DAY

| | | | VIABLE FETUSES | | | DEAD FETUSES | | | EARLY RESORPTIONS | | | LATE RESORPTIONS | | | IMPLANTATION SITES | | | CORPORA LUTEA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SEX | | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT OVARY | LEFT OVARY | TOTAL |
| RAT # | M | F | | | | | | | | | | | | | | | | | | |
| 16524 | 7 | 7 | 9 | 5 | 14 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 9 | 6 | 15 | 9 | 6 | 15 |
| 16525 | 12 | 4 | 9 | 7 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 10 | 7 | 17 | 10 | 9 | 19 |
| 16526 | 7 | 7 | 8 | 6 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 6 | 15 | 10 | 6 | 16 |
| 16528 | 8 | 7 | 7 | 8 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 9 | 16 | 9 | 12 | 21 |
| 16529 | 9 | 7 | 8 | 8 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 8 | 17 | 10 | 8 | 18 |
| 16531 | 6 | 10 | 9 | 7 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 10 | 7 | 17 | 10 | 8 | 18 |
| 16532 | 12 | 6 | 7 | 11 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 11 | 18 | 8 | 12 | 20 |
| 16535 | 8 | 7 | 8 | 7 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 7 | 16 | 9 | 7 | 16 |
| 16536 | 4 | 10 | 6 | 8 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 8 | 14 | 6 | 9 | 15 |
| 16539 | 6 | 8 | 7 | 7 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 7 | 15 | 8 | 7 | 15 |
| 16540 | 7 | 8 | 8 | 7 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 7 | 15 | 8 | 12 | 20 |
| 16541 | 6 | 9 | 9 | 6 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 6 | 15 | 10 | 7 | 17 |
| 16542 | 6 | 12 | 8 | 10 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 18 | 10 | 10 | 20 |
| 16544 | 9 | 5 | 7 | 7 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 7 | 15 | 9 | 9 | 18 |
| 16545 | 6 | 7 | 5 | 8 | 13 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 9 | 14 | 6 | 9 | 15 |
| 16546 | 6 | 11 | 8 | 9 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 17 | 12 | 12 | 24 |

M = MALE F = FEMALE
PLACENTAE APPEARED NORMAL UNLESS NOTED OTHERWISE.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B27 (PAGE 3): CAESAREAN-SECTIONING OBSERVATIONS - INDIVIDUAL DATA - PART A

DOSAGE GROUP III 0.1 MG/KG/DAY

| | | | VIABLE FETUSES | | | DEAD FETUSES | | | EARLY RESORPTIONS | | | LATE RESORPTIONS | | | IMPLANTATION SITES | | | CORPORA LUTEA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SEX | | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT OVARY | LEFT OVARY | TOTAL |
| RAT # | M | F | | | | | | | | | | | | | | | | | | |
| 16547 | 9 | 7 | 8 | 8 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 16 | 9 | 9 | 18 |
| 16548 | 7 | 9 | 11 | 5 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 5 | 16 | 11 | 6 | 17 |
| 16550 | 8 | 8 | 10 | 6 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 | 6 | 17 | 13 | 6 | 19 |
| 16552 | 8 | 9 | 7 | 10 | 17 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 11 | 18 | 10 | 11 | 21 |
| 16553 | 8 | 6 | 7 | 7 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 14 | 8 | 9 | 17 |
| 16554 | 8 | 9 | 11 | 6 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 17 | 12 | 9 | 21 |
| 16555 | 7 | 9 | 11 | 5 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 | 5 | 17 | 12 | 6 | 18 |
| 16557 | 7 | 9 | 6 | 10 | 16 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 8 | 11 | 19 | 11 | 15 | 26 |
| 16559 | 8 | 9 | 9 | 8 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 9 | 10 | 19 | 11 | 12 | 23 |
| 16560 | 8 | 9 | 8 | 9 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 9 | 18 | 12 | 9 | 21 |
| 16561 | 11 | 5 | 7 | 9 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 9 | 16 | 7 | 9 | 16 |
| 16562 | 6 | 9 | 6 | 9 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 9 | 15 | 6 | 10 | 16 |
| 16563 | 6 | 9 | 5 | 10 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 11 | 16 | 6 | 14 | 20 |
| 16565 | 11 | 6 | 11 | 6 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 11 | 8 | 19 | 15 | 9 | 24 |
| 16566 | 10 | 7 | 13 | 4 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 17 | 13 | 4 | 17 |
| 16567 | 7 | 5 | 3 | 9 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 12 | 4 | 9 | 13 |

M = MALE F = FEMALE
PLACENTAE APPEARED NORMAL UNLESS NOTED OTHERWISE.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B27 (PAGE 4): CAESAREAN-SECTIONING OBSERVATIONS - INDIVIDUAL DATA - PART A

DOSAGE GROUP IV 1.0 MG/KG/DAY

| | SEX | | VIABLE FETUSES | | | DEAD FETUSES | | | EARLY RESORPTIONS | | | LATE RESORPTIONS | | | IMPLANTATION SITES | | | CORPORA LUTEA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | M | F | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT OVARY | LEFT OVARY | TOTAL |
| 16570 | 8 | 4 | 9 | 3 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 12 | 10 | 4 | 14 |
| 16571 | 3 | 12 | 7 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 15 | 9 | 9 | 18 |
| 16574 | 8 | 7 | 6 | 9 | 15 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 8 | 9 | 17 | 14 | 10 | 24 |
| 16575 | 7 | 7 | 5 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 14 | 5 | 11 | 16 |
| 16576 | 8 | 7 | 6 | 9 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 6 | 10 | 16 | 6 | 11 | 17 |
| 16577 | 7 | 9 | 6 | 10 | 16 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 8 | 10 | 18 | 9 | 11 | 20 |
| 16578 | 11 | 6 | 6 | 11 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 7 | 11 | 18 | 7 | 11 | 18 |
| 16579 | 4 | 12 | 5 | 11 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 11 | 16 | 6 | 16 | 22 |
| 16580 | 8 | 9 | 9 | 8 | 17 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 9 | 9 | 18 | 10 | 10 | 20 |
| 16581 | 9 | 8 | 9 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 8 | 17 | 12 | 10 | 22 |
| 16582 | 7 | 7 | 7 | 7 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 14 | 11 | 10 | 21 |
| 16583 | 5 | 12 | 9 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 8 | 17 | 9 | 10 | 19 |
| 16584 | 6 | 10 | 6 | 10 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 10 | 16 | 7 | 10 | 17 |
| 16587 | 7 | 10 | 9 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 8 | 17 | 9 | 8 | 17 |
| 16589 | 9 | 10 | 10 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 9 | 19 | 10 | 9 | 19 |
| 16592 | 4 | 10 | 5 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 14 | 9 | 9 | 18 |

M = MALE F = FEMALE
PLACENTAE APPEARED NORMAL UNLESS NOTED OTHERWISE.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B27 (PAGE 5): CAESAREAN-SECTIONING OBSERVATIONS - INDIVIDUAL DATA - PART A

DOSAGE GROUP V 30.0 MG/KG/DAY

| | SEX | | VIABLE FETUSES | | | DEAD FETUSES | | | EARLY RESORPTIONS | | | LATE RESORPTIONS | | | IMPLANTATION SITES | | | CORPORA LUTEA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | M | F | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT HORN | LEFT HORN | TOTAL | RIGHT OVARY | LEFT OVARY | TOTAL |
| 16593 | 6 | 7 | 4 | 9 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 9 | 13 | 4 | 13 | 17 |
| 16594 | 8 | 8 | 6 | 10 | 16 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 6 | 11 | 17 | 7 | 11 | 18 |
| 16596 | 8 | 12 | 13 | 7 | 20 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 14 | 9 | 23 | 18 | 13 | 31 |
| 16597 | 8 | 5 | 10 | 3 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 3 | 13 | 10 | 3 | 13 |
| 16598 | 8 | 8 | 9 | 7 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 7 | 16 | 10 | 7 | 17 |
| 16600 | 7 | 10 | 11 | 6 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 17 | 12 | 10 | 22 |
| 16601 | 5 | 9 | 7 | 7 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 8 | 7 | 15 | 10 | 7 | 17 |
| 16602 | 10 | 6 | 10 | 6 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | 16 | 10 | 7 | 17 |
| 16605 | 9 | 6 | 9 | 6 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 10 | 6 | 16 | 13 | 6 | 19 |
| 16606 | 5 | 11 | 8 | 8 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 16 | 8 | 10 | 18 |
| 16608 | 12 | 4 | 10 | 6 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 | 6 | 17 | 11 | 7 | 18 |
| 16609 | 7 | 6 | 6 | 7 | 13 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 8 | 7 | 15 | 8 | 7 | 15 |
| 16610 | 8 | 7 | 10 | 5 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 15 | 10 | 6 | 16 |
| 16611 | 9 | 5 | 10 | 4 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 14 | 12 | 5 | 17 |
| 16613 | 12 | 6 | 10 | 8 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 18 | 11 | 8 | 19 |
| 16614 | 6 | 9 | 8 | 7 | 15 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 10 | 7 | 17 | 12 | 10 | 22 |

M = MALE F = FEMALE
PLACENTAE APPEARED NORMAL UNLESS NOTED OTHERWISE.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B28 (PAGE 1): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - INDIVIDUAL DATA - PART A

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| | NUMBER OF LIVE FETUSES | | | AVERAGE FETAL BODY WEIGHT (G) | | | ---- CONCEPTUSES ------ RESORBED | | |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | MALE | FEMALE | TOTAL | MALE | FEMALE | TOTAL a | N | N | % |
| 16501 | 11 | 4 | 15 | 5.53 | 5.25 | 5.45 | 16 | 1 | 6.2 |
| 16502 | 6 | 8 | 14 | 5.31 | 5.04 | 5.16 | 15 | 1 | 6.7 |
| 16503 | 7 | 6 | 13 | 5.09 | 4.56 | 4.84 | 15 | 2 | 13.3 |
| 16504 | 7 | 7 | 14 | 5.59 | 5.30 | 5.44 | 15 | 1 | 6.7 |
| 16505 | 7 | 7 | 14 | 5.34 | 5.17 | 5.26 | 14 | 0 | 0.0 |
| 16506 | 6 | 6 | 12 | 5.10 | 5.00 | 5.05 | 13 | 1 | 7.7 |
| 16508 | 8 | 9 | 17 | 4.90 | 4.50 | 4.69 | 17 | 0 | 0.0 |
| 16509 | 7 | 7 | 14 | 5.36 | 5.36 | 5.36 | 15 | 1 | 6.7 |
| 16510 | 9 | 8 | 17 | 5.20 | 4.92 | 5.07 | 17 | 0 | 0.0 |
| 16513 | 8 | 7 | 15 | 5.23 | 5.04 | 5.14 | 15 | 0 | 0.0 |
| 16514 | 8 | 6 | 14 | 5.23 | 5.17 | 5.20 | 14 | 0 | 0.0 |
| 16515 | 7 | 8 | 15 | 5.07 | 4.69 | 4.87 | 16 | 1 | 6.2 |
| 16516 | 8 | 8 | 16 | 5.34 | 5.11 | 5.22 | 16 | 0 | 0.0 |
| 16519 | 5 | 10 | 15 | 5.07 | 4.72 | 4.84 | 15 | 0 | 0.0 |
| 16521 | 8 | 6 | 14 | 5.36 | 4.97 | 5.20 | 14 | 0 | 0.0 |
| 16522 | 7 | 11 | 18 | 4.82 | 4.62 | 4.70 | 18 | 0 | 0.0 |

a. TOTAL = SUM OF FETAL WEIGHTS/NUMBER OF LIVE FETUSES.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B28 (PAGE 2): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - INDIVIDUAL DATA - PART A

DOSAGE GROUP II 0.01 MG/KG/DAY

| | NUMBER OF LIVE FETUSES | | | AVERAGE FETAL BODY WEIGHT (G) | | | ---- CONCEPTUSES ------ RESORBED | | |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | MALE | FEMALE | TOTAL | MALE | FEMALE | TOTAL a | N | N | % |
| 16524 | 7 | 7 | 14 | 5.35 | 4.95 | 5.15 | 15 | 1 | 6.7 |
| 16525 | 12 | 4 | 16 | 5.06 | 4.72 | 4.97 | 17 | 1 | 5.9 |
| 16526 | 7 | 7 | 14 | 5.35 | 5.12 | 5.24 | 15 | 1 | 6.7 |
| 16528 | 8 | 7 | 15 | 5.02 | 4.60 | 4.82 | 16 | 1 | 6.2 |
| 16529 | 9 | 7 | 16 | 4.92 | 4.98 | 4.95 | 17 | 1 | 5.9 |
| 16531 | 6 | 10 | 16 | 5.34 | 5.04 | 5.15 | 17 | 1 | 5.9 |
| 16532 | 12 | 6 | 18 | 4.73 | 4.16 | 4.54 | 18 | 0 | 0.0 |
| 16535 | 8 | 7 | 15 | 5.41 | 5.07 | 5.25 | 16 | 1 | 6.2 |
| 16536 | 4 | 10 | 14 | 5.39 | 5.37 | 5.38 | 14 | 0 | 0.0 |
| 16539 | 6 | 8 | 14 | 5.56 | 5.26 | 5.39 | 15 | 1 | 6.7 |
| 16540 | 7 | 8 | 15 | 4.98 | 4.66 | 4.81 | 15 | 0 | 0.0 |
| 16541 | 6 | 9 | 15 | 4.99 | 4.60 | 4.76 | 15 | 0 | 0.0 |
| 16542 | 6 | 12 | 18 | 5.02 | 4.91 | 4.95 | 18 | 0 | 0.0 |
| 16544 | 9 | 5 | 14 | 5.47 | 5.11 | 5.34 | 15 | 1 | 6.7 |
| 16545 | 6 | 7 | 13 | 5.42 | 4.99 | 5.19 | 14 | 1 | 7.1 |
| 16546 | 6 | 11 | 17 | 4.94 | 4.80 | 4.85 | 17 | 0 | 0.0 |

a. TOTAL = SUM OF FETAL WEIGHTS/NUMBER OF LIVE FETUSES.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B28 (PAGE 3): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - INDIVIDUAL DATA - PART A

DOSAGE GROUP III 0.1 MG/KG/DAY

| | NUMBER OF LIVE FETUSES | | | AVERAGE FETAL BODY WEIGHT (G) | | | ---- CONCEPTUSES ------ RESORBED | | |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | MALE | FEMALE | TOTAL | MALE | FEMALE | TOTAL a | N | N | % |
| 16547 | 9 | 7 | 16 | 5.09 | 4.82 | 4.98 | 16 | 0 | 0.0 |
| 16548 | 7 | 9 | 16 | 5.58 | 5.18 | 5.36 | 16 | 0 | 0.0 |
| 16550 | 8 | 8 | 16 | 4.96 | 4.75 | 4.86 | 17 | 1 | 5.9 |
| 16552 | 8 | 9 | 17 | 4.50 | 4.52 | 4.51 | 18 | 1 | 5.6 |
| 16553 | 8 | 6 | 14 | 5.16 | 4.93 | 5.06 | 14 | 0 | 0.0 |
| 16554 | 8 | 9 | 17 | 4.59 | 4.78 | 4.69 | 17 | 0 | 0.0 |
| 16555 | 7 | 9 | 16 | 5.48 | 5.14 | 5.29 | 17 | 1 | 5.9 |
| 16557 | 7 | 9 | 16 | 5.03 | 4.54 | 4.76 | 19 | 3 | 15.8 |
| 16559 | 8 | 9 | 17 | 5.27 | 4.90 | 5.07 | 19 | 2 | 10.5 |
| 16560 | 8 | 9 | 17 | 5.32 | 5.19 | 5.25 | 18 | 1 | 5.6 |
| 16561 | 11 | 5 | 16 | 5.06 | 4.80 | 4.98 | 16 | 0 | 0.0 |
| 16562 | 6 | 9 | 15 | 5.71 | 5.40 | 5.52 | 15 | 0 | 0.0 |
| 16563 | 6 | 9 | 15 | 4.78 | 4.57 | 4.65 | 16 | 1 | 6.2 |
| 16565 | 11 | 6 | 17 | 4.93 | 4.82 | 4.89 | 19 | 2 | 10.5 |
| 16566 | 10 | 7 | 17 | 4.72 | 4.30 | 4.55 | 17 | 0 | 0.0 |
| 16567 | 7 | 5 | 12 | 5.41 | 5.34 | 5.38 | 12 | 0 | 0.0 |

a. TOTAL = SUM OF FETAL WEIGHTS/NUMBER OF LIVE FETUSES.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B28 (PAGE 4): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - INDIVIDUAL DATA - PART A

DOSAGE GROUP IV 1.0 MG/KG/DAY

| | NUMBER OF LIVE FETUSES | | | AVERAGE FETAL BODY WEIGHT (G) | | | ---- CONCEPTUSES ------ RESORBED | | |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | MALE | FEMALE | TOTAL | MALE | FEMALE | TOTAL a | N | N | % |
| 16570 | 8 | 4 | 12 | 5.30 | 5.11 | 5.24 | 12 | 0 | 0.0 |
| 16571 | 3 | 12 | 15 | 5.05 | 4.96 | 4.97 | 15 | 0 | 0.0 |
| 16574 | 8 | 7 | 15 | 4.43 | 4.13 | 4.29 | 17 | 2 | 11.8 |
| 16575 | 7 | 7 | 14 | 5.55 | 5.24 | 5.39 | 14 | 0 | 0.0 |
| 16576 | 8 | 7 | 15 | 5.27 | 4.89 | 5.09 | 16 | 1 | 6.2 |
| 16577 | 7 | 9 | 16 | 4.70 | 4.52 | 4.60 | 18 | 2 | 11.1 |
| 16578 | 11 | 6 | 17 | 4.91 | 4.69 | 4.83 | 18 | 1 | 5.6 |
| 16579 | 4 | 12 | 16 | 5.53 | 4.91 | 5.06 | 16 | 0 | 0.0 |
| 16580 | 8 | 9 | 17 | 5.57 | 4.86 | 5.20 | 18 | 1 | 5.6 |
| 16581 | 9 | 8 | 17 | 4.64 | 4.45 | 4.55 | 17 | 0 | 0.0 |
| 16582 | 7 | 7 | 14 | 5.32 | 4.71 | 5.02 | 14 | 0 | 0.0 |
| 16583 | 5 | 12 | 17 | 5.79 | 5.36 | 5.49 | 17 | 0 | 0.0 |
| 16584 | 6 | 10 | 16 | 4.83 | 4.53 | 4.64 | 16 | 0 | 0.0 |
| 16587 | 7 | 10 | 17 | 5.52 | 4.99 | 5.21 | 17 | 0 | 0.0 |
| 16589 | 9 | 10 | 19 | 5.29 | 4.90 | 5.09 | 19 | 0 | 0.0 |
| 16592 | 4 | 10 | 14 | 5.26 | 5.14 | 5.18 | 14 | 0 | 0.0 |

a. TOTAL = SUM OF FETAL WEIGHTS/NUMBER OF LIVE FETUSES.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B28 (PAGE 5): LITTER OBSERVATIONS (CAESAREAN-DELIVERED FETUSES) - INDIVIDUAL DATA - PART A

DOSAGE GROUP V 30.0 MG/KG/DAY

| | NUMBER OF LIVE FETUSES | | | AVERAGE FETAL BODY WEIGHT (G) | | | ---- CONCEPTUSES ------ | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | RESORBED | |
| RAT # | MALE | FEMALE | TOTAL | MALE | FEMALE | TOTAL a | N | N | % |
| 16593 | 6 | 7 | 13 | 5.26 | 4.75 | 4.98 | 13 | 0 | 0.0 |
| 16594 | 8 | 8 | 16 | 4.85 | 4.92 | 4.89 | 17 | 1 | 5.9 |
| 16596 | 8 | 12 | 20 | 4.89 | 4.44 | 4.62 | 23 | 3 | 13.0 |
| 16597 | 8 | 5 | 13 | 5.57 | 5.19 | 5.43 | 13 | 0 | 0.0 |
| 16598 | 8 | 8 | 16 | 4.96 | 4.86 | 4.91 | 16 | 0 | 0.0 |
| 16600 | 7 | 10 | 17 | 4.87 | 4.69 | 4.76 | 17 | 0 | 0.0 |
| 16601 | 5 | 9 | 14 | 4.67 | 4.80 | 4.75 | 15 | 1 | 6.7 |
| 16602 | 10 | 6 | 16 | 5.52 | 5.10 | 5.36 | 16 | 0 | 0.0 |
| 16605 | 9 | 6 | 15 | 5.07 | 4.99 | 5.04 | 16 | 1 | 6.2 |
| 16606 | 5 | 11 | 16 | 5.54 | 5.24 | 5.33 | 16 | 0 | 0.0 |
| 16608 | 12 | 4 | 16 | 5.00 | 4.44 | 4.86 | 17 | 1 | 5.9 |
| 16609 | 7 | 6 | 13 | 5.16 | 4.84 | 5.01 | 15 | 2 | 13.3 |
| 16610 | 8 | 7 | 15 | 5.36 | 5.06 | 5.22 | 15 | 0 | 0.0 |
| 16611 | 9 | 5 | 14 | 5.76 | 5.28 | 5.59 | 14 | 0 | 0.0 |
| 16613 | 12 | 6 | 18 | 5.31 | 5.10 | 5.24 | 18 | 0 | 0.0 |
| 16614 | 6 | 9 | 15 | 5.25 | 4.77 | 4.96 | 17 | 2 | 11.8 |

a. TOTAL = SUM OF FETAL WEIGHTS/NUMBER OF LIVE FETUSES.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B29 (PAGE 1): FETAL SEX, VITAL STATUS AND BODY WEIGHT - INDIVIDUAL DATA - PART A

DOSAGE GROUP I GROUP I 0 MG/KG/DAY

| FETUS # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # CLs | | | | | | | | | | | | | | | | | | | | | | | |
| 16501 10/ 8 | MA | MA | MA | MA | MA | MA | FA | MA | MA | FA / MA | | FA | MA | FA | MA | E | | | | | | | |
| | 5.44 | 5.81 | 5.80 | 5.72 | 5.56 | 5.45 | 5.42 | 5.85 | 5.34 | 4.91 | 5.30 | 5.27 | 5.33 | 5.40 | 5.22 | | | | | | | | |
| 16502 3/12 | E | FA | MA / FA | | FA | FA | MA | FA | MA | MA | FA | MA | FA | FA | MA | | | | | | | | |
| | | 5.35 | 5.26 | 5.03 | 4.91 | 5.04 | 5.21 | 4.90 | 5.25 | 5.38 | 4.90 | 5.35 | 4.95 | 5.27 | 5.43 | | | | | | | | |
| 16503 10/ 5 | E | FA | L | FA | MA | MA | MA | FA | FA | MA / FA | | MA | FA | MA | MA | | | | | | | | |
| | | 4.33 | | 4.34 | 4.83 | 5.42 | 5.08 | 4.81 | 4.50 | 5.36 | 4.79 | 5.00 | 4.59 | 4.72 | 5.20 | | | | | | | | |
| 16504 10/12 | FA | MA | MA | FA | FA | MA | FA / MA | | MA | MA | FA | FA | FA | MA | E | | | | | | | | |
| | 5.05 | 5.49 | 5.96 | 5.18 | 5.23 | 5.48 | 5.32 | 5.33 | 5.77 | 5.54 | 5.40 | 5.45 | 5.47 | 5.56 | | | | | | | | | |
| 16505 8/10 | MA | MA | FA | FA | FA / FA | | MA | FA | MA | MA | MA | MA | FA | FA | | | | | | | | | |
| | 5.50 | 5.36 | 5.44 | 5.37 | 4.87 | 4.98 | 5.46 | 5.22 | 5.63 | 5.46 | 5.11 | 4.88 | 4.95 | 5.36 | | | | | | | | | |
| 16506 11/ 8 | FA | E | MA | MA | FA | MA | MA / FA | | FA | MA | FA | FA | MA | | | | | | | | | | |
| | 5.10 | | 5.06 | 4.97 | 5.08 | 5.22 | 4.59 | 4.70 | 5.23 | 5.38 | 5.33 | 4.55 | 5.36 | | | | | | | | | | |
| 16508 8/ 9 | MA | MA | MA | FA | FA | FA | MA | MA / FA | | MA | FA | FA | MA | MA | FA | FA | FA | | | | | | |
| | 5.03 | 5.12 | 4.89 | 4.90 | 4.17 | 4.75 | 4.64 | 4.79 | 4.77 | 5.03 | 4.48 | 4.55 | 4.77 | 4.93 | 4.16 | 4.06 | 4.70 | | | | | | |
| 16509 9/ 7 | E | FA | MA | FA | MA | FA | MA | MA | FA / FA | | FA | MA | FA | MA | MA | | | | | | | | |
| | | 5.28 | 5.48 | 5.94 | 5.38 | 5.45 | 5.53 | 5.14 | 4.86 | 5.27 | 5.14 | 5.29 | 5.55 | 5.39 | 5.35 | | | | | | | | |
| 16510 8/11 | MA | MA | MA | FA | FA | MA | FA / FA | | MA | MA | FA | MA | FA | FA | MA | FA | MA | | | | | | |
| | 5.49 | 4.96 | 5.17 | 5.02 | 5.13 | 5.49 | 5.19 | 4.80 | 5.17 | 4.71 | 3.99 | 5.15 | 5.15 | 5.00 | 5.41 | 5.08 | 5.23 | | | | | | |
| 16513 7/ 9 | MA | MA | MA | FA | FA | MA | FA / FA | | MA | FA | MA | FA | MA | MA | FA | | | | | | | | |
| | 5.09 | 5.37 | 5.36 | 5.02 | 5.37 | 5.14 | 5.09 | 4.81 | 5.39 | 5.38 | 4.95 | 4.69 | 5.29 | 5.26 | 4.94 | | | | | | | | |
| 16514 3/13 | FA | FA / MA | | MA | FA | FA | MA | MA | FA | MA | FA | MA | MA | MA | | | | | | | | | |
| | 5.66 | 5.54 | 4.73 | 5.49 | 4.88 | 4.77 | 4.99 | 5.07 | 4.92 | 5.28 | 5.25 | 5.23 | 5.40 | 5.65 | | | | | | | | | |
| 16515 13/ 6 | FA | FA | MA | E | FA | FA | MA | MA | MA | FA / FA | | MA | MA | FA | FA | MA | | | | | | | |
| | 4.85 | 4.67 | 5.06 | | 4.99 | 4.38 | 4.88 | 4.71 | 5.53 | 4.90 | 3.56 | 5.08 | 4.94 | 4.98 | 5.19 | 5.27 | | | | | | | |
| 16516 10/ 8 | FA | MA | FA | FA | FA | MA | MA | MA / FA | | MA | FA | FA | MA | MA | FA | MA | | | | | | | |
| | 4.58 | 5.38 | 5.38 | 5.43 | 5.00 | 5.15 | 4.95 | 5.60 | 5.00 | 5.45 | 5.20 | 5.04 | 5.28 | 5.53 | 5.25 | 5.35 | | | | | | | |
| 16519 8/ 9 | MA | FA | FA | FA | FA | MA / FA | | MA | FA | FA | MA | MA | FA | FA | FA | | | | | | | | |
| | 4.80 | 4.74 | 4.96 | 4.96 | 4.91 | 5.11 | 4.42 | 5.15 | 4.51 | 4.72 | 5.10 | 5.20 | 4.57 | 4.87 | 4.56 | | | | | | | | |
| 16521 11/ 6 | FA | MA | MA | FA | MA | FA | MA | FA / FA | | MA | MA | MA | MA | FA | | | | | | | | | |
| | 4.97 | 5.60 | 5.17 | 5.23 | 5.21 | 4.82 | 5.17 | 4.76 | 4.99 | 5.60 | 5.45 | 5.51 | 5.19 | 5.07 | | | | | | | | | |
| 16522 16/ 7 | FA | FA | FA | MA | MA | MA | FA | FA | FA | MA | MA | FA / MA | | FA | FA | FA | FA | MA | | | | | |
| | 4.66 | 4.28 | 4.54 | 4.92 | 4.92 | 4.87 | 4.38 | 4.77 | 4.81 | 4.56 | 4.88 | 4.71 | 4.72 | 4.43 | 4.71 | 4.70 | 4.86 | 4.87 | | | | | |

M = MALE F = FEMALE A = ALIVE E = EARLY RESORPTION L = LATE RESORPTION "/" DENOTES POSITION OF CERVIX
CLs = CORPORA LUTEA/OVARY FETAL BODY WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B29 (PAGE 2): FETAL SEX, VITAL STATUS AND BODY WEIGHT - INDIVIDUAL DATA - PART A

DOSAGE GROUP II GROUP II 0.01 MG/KG/DAY

| FETUS # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # CLs | | | | | | | | | | | | | | | | | | | | | | | |
| 16524 9/ 6 | FA | FA | MA | MA | MA | MA | FA | MA | FA / | E | FA | MA | FA | FA | MA | | | | | | | | |
| | 5.28 | 5.00 | 5.16 | 5.91 | 5.53 | 5.52 | 4.80 | 4.84 | 5.32 | | 5.22 | 5.45 | 5.13 | 3.88 | 5.07 | | | | | | | | |
| 16525 10/ 9 | MA | MA | FA | FA | MA | MA | MA | MA | MA | E / | MA | MA | MA | MA | FA | MA | FA | | | | | | |
| | 4.79 | 4.94 | 4.60 | 4.94 | 5.21 | 5.04 | 5.07 | 4.99 | 5.54 | | 4.83 | 5.12 | 5.02 | 5.06 | 4.79 | 5.05 | 4.56 | | | | | | |
| 16526 10/ 6 | MA | E | MA | MA | FA | FA | MA | MA | FA / | FA | MA | FA | FA | FA | MA | | | | | | | | |
| | 5.30 | | 5.37 | 5.19 | 5.05 | 4.87 | 5.52 | 5.27 | 5.27 | 5.03 | 5.42 | 5.49 | 5.05 | 5.11 | 5.40 | | | | | | | | |
| 16528 9/12 | MA | FA | FA | FA | MA | MA | FA / | MA | E | FA | MA | MA | FA | FA | MA | MA | | | | | | | |
| | 4.86 | 4.77 | 4.98 | 4.71 | 5.14 | 5.14 | 4.16 | 5.09 | | 4.44 | 5.16 | 4.23 | 4.46 | 4.68 | 5.25 | 5.26 | | | | | | | |
| 16529 10/ 8 | MA | MA | MA | MA | E | FA | FA | FA | FA / | MA | MA | MA | MA | FA | FA | MA | FA | | | | | | |
| | 4.74 | 4.81 | 5.27 | 5.21 | | 4.92 | 5.17 | 4.84 | 5.22 | 4.56 | 4.81 | 4.82 | 4.86 | 5.13 | 4.63 | 5.23 | 4.98 | | | | | | |
| 16531 10/ 8 | MA | FA | MA | FA | MA | FA | E | FA | FA | FA / | FA | FA | FA | MA | FA | MA | MA | | | | | | |
| | 4.62 | 4.52 | 5.52 | 5.27 | 5.40 | 5.53 | | 4.94 | 5.00 | 4.93 | 4.97 | 4.73 | 5.26 | 5.30 | 5.23 | 5.47 | 5.70 | | | | | | |
| 16532 8/12 | MA | MA | FA | FA | MA | MA | MA / | MA | FA | MA | MA | MA | FA | MA | FA | MA | FA | MA | | | | | |
| | 4.87 | 5.13 | 4.77 | 2.53 | 4.68 | 4.93 | 5.01 | 4.19 | 4.42 | 4.46 | 4.60 | 4.51 | 4.19 | 4.65 | 4.57 | 4.97 | 4.49 | 4.81 | | | | | |
| 16535 9/ 7 | FA | FA | MA | FA | FA | MA | MA | MA | E / | MA | FA | MA | FA | MA | FA | MA | | | | | | | |
| | 5.09 | 5.04 | 5.39 | 5.39 | 5.25 | 5.49 | 5.41 | 5.35 | | 5.40 | 4.89 | 5.37 | 4.95 | 5.22 | 4.89 | 5.68 | | | | | | | |
| 16536 6/ 9 | FA | FA | FA | MA | MA | FA / | FA | FA | FA | MA | FA | FA | MA | FA | | | | | | | | | |
| | 4.65 | 5.46 | 5.38 | 5.30 | 5.26 | 4.88 | 5.45 | 6.01 | 5.41 | 5.52 | 5.62 | 5.46 | 5.49 | 5.41 | | | | | | | | | |
| 16539 8/ 7 | FA | E | MA | FA | FA | FA | MA | MA / | MA | MA | MA | FA | FA | FA | FA | | | | | | | | |
| | 4.65 | | 5.38 | 5.30 | 5.26 | 4.88 | 5.45 | 6.01 | 5.41 | 5.52 | 5.62 | 5.46 | 5.49 | 5.41 | 5.65 | | | | | | | | |
| 16540 8/12 | FA | FA | FA | MA | MA | MA | FA | FA / | FA | MA | MA | FA | MA | FA | MA | | | | | | | | |
| | 4.77 | 4.44 | 4.54 | 5.10 | 4.78 | 4.69 | 4.75 | 4.93 | 4.93 | 4.94 | 5.13 | 4.57 | 5.02 | 4.33 | 5.24 | | | | | | | | |
| 16541 10/ 7 | FA | MA | MA | FA | MA | MA | FA | FA | FA / | FA | FA | FA | FA | MA | MA | | | | | | | | |
| | 4.16 | 4.83 | 4.80 | 5.07 | 5.23 | 4.80 | 4.60 | 4.63 | 4.88 | 4.66 | 4.48 | 4.41 | 4.52 | 5.25 | 5.03 | | | | | | | | |
| 16542 10/10 | FA | MA | FA | FA | MA | FA | MA | FA / | MA | FA | FA | FA | FA | MA | FA | MA | FA | FA | | | | | |
| | 5.01 | 4.57 | 5.15 | 4.63 | 5.38 | 4.98 | 4.85 | 4.95 | 5.13 | 5.06 | 5.21 | 4.77 | 4.81 | 5.05 | 4.83 | 5.15 | 4.85 | 4.70 | | | | | |
| 16544 9/ 9 | E | MA | FA | MA | MA | FA | MA | MA / | MA | FA | MA | FA | FA | MA | MA | | | | | | | | |
| | | 5.36 | 5.10 | 5.37 | 5.51 | 5.16 | 5.56 | 5.62 | 5.44 | 5.24 | 5.47 | 5.06 | 4.97 | 5.40 | 5.47 | | | | | | | | |
| 16545 6/ 9 | MA | FA | MA | MA | MA / | FA | FA | MA | MA | FA | FA | FA | FA | E | | | | | | | | | |
| | 5.45 | 5.46 | 5.51 | 5.22 | 5.69 | 4.87 | 4.69 | 5.47 | 5.20 | 4.89 | 5.18 | 4.96 | 4.89 | | | | | | | | | | |
| 16546 12/12 | FA | MA | MA | FA | FA | MA | FA | FA / | FA | FA | FA | FA | MA | MA | FA | FA | MA | | | | | | |
| | 4.81 | 4.51 | 5.38 | 4.73 | 5.21 | 4.14 | 5.19 | 3.91 | 4.76 | 4.92 | 4.81 | 4.52 | 5.40 | 5.60 | 4.89 | 5.08 | 4.59 | | | | | | |

M = MALE F = FEMALE A = ALIVE E = EARLY RESORPTION L = LATE RESORPTION "/" DENOTES POSITION OF CERVIX
CLs = CORPORA LUTEA/OVARY FETAL BODY WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B29 (PAGE 3): FETAL SEX, VITAL STATUS AND BODY WEIGHT - INDIVIDUAL DATA - PART A

DOSAGE GROUP III GROUP III 0.1 MG/KG/DAY

| RAT # | CLs | FETUS # 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16547 | 9/ 9 | MA | MA | MA | MA | FA | FA | FA | MA / | FA | MA | FA | FA | MA | FA | MA | MA | | | | | | | |
| | | 4.95 | 4.92 | 5.03 | 4.98 | 5.15 | 4.69 | 4.80 | 5.33 | 4.62 | 5.10 | 4.69 | 4.58 | 5.40 | 5.25 | 4.85 | 5.27 | | | | | | | |
| 16548 | 11/ 6 | FA | MA | FA | MA | MA | FA | FA | MA | MA | FA | FA / | FA | FA | MA | MA | FA | | | | | | | |
| | | 4.90 | 4.98 | 4.71 | 5.59 | 5.91 | 5.28 | 5.44 | 5.60 | 5.86 | 5.41 | 5.56 | 4.94 | 5.25 | 5.59 | 5.57 | 5.16 | | | | | | | |
| 16550 | 13/ 6 | FA | MA | FA | E | MA | MA | MA | FA | MA | MA | MA / | FA | FA | MA | FA | FA | FA | | | | | | |
| | | 4.65 | 5.25 | 4.66 | | 4.68 | 4.94 | 4.76 | 4.74 | 4.74 | 4.93 | 5.28 | 4.72 | 4.66 | 5.14 | 4.87 | 4.67 | 5.03 | | | | | | |
| 16552 | 10/11 | FA | MA | MA | FA | MA | MA | FA / | FA | MA | FA | MA | MA | FA | MA | FA | FA | FA | E | | | | | |
| | | 4.68 | 4.86 | 4.43 | 4.63 | 4.32 | 4.50 | 4.79 | 4.21 | 4.76 | 4.42 | 4.17 | 4.59 | 4.19 | 4.34 | 4.33 | 4.46 | 4.98 | | | | | | |
| 16553 | 8/ 9 | MA | MA | MA | FA | MA | MA | FA / | MA | FA | MA | FA | FA | FA | MA | | | | | | | | | |
| | | 5.01 | 5.47 | 5.25 | 5.00 | 4.79 | 5.13 | 4.81 | 5.28 | 4.61 | 5.00 | 5.08 | 4.98 | 5.12 | 5.35 | | | | | | | | | |
| 16554 | 12/ 9 | FA | FA | FA | MA | MA | FA | MA | MA | MA | MA | FA / | FA | MA | FA | MA | FA | FA | | | | | | |
| | | 4.90 | 4.83 | 4.82 | 5.09 | 5.03 | 4.90 | 3.76 | 4.62 | 4.48 | 4.64 | 4.41 | 4.83 | 4.91 | 4.60 | 4.22 | 4.51 | 5.18 | | | | | | |
| 16555 | 12/ 6 | FA | FA | FA | FA | FA | FA | MA | FA | MA | E | MA | MA / | MA | FA | MA | MA | FA | | | | | | |
| | | 4.92 | 5.10 | 5.19 | 5.20 | 5.11 | 5.05 | 5.56 | 5.41 | 5.05 | | 5.26 | 5.65 | 5.51 | 5.26 | 5.71 | 5.62 | 5.02 | | | | | | |
| 16557 | 11/15 | E | E | FA | MA | FA | MA | FA | MA / | E | FA | MA | FA | FA | FA | MA | MA | MA | FA | FA | | | | |
| | | | | 4.65 | 5.08 | 4.73 | 5.46 | 4.80 | 5.05 | | 4.25 | 4.89 | 4.45 | 4.80 | 4.69 | 5.05 | 5.04 | 4.66 | 4.21 | 4.29 | | | | |
| 16559 | 11/12 | MA | FA | FA | MA | MA | FA | MA | FA | MA / | FA | MA | MA | FA | E | FA | FA | MA | FA | E | | | | |
| | | 5.35 | 4.79 | 4.88 | 5.16 | 5.21 | 5.14 | 5.70 | 5.13 | 5.33 | 4.37 | 5.09 | 4.82 | 4.90 | | 5.00 | 4.93 | 5.50 | 4.94 | | | | | |
| 16560 | 12/ 9 | MA | E | FA | FA | FA | MA | MA | FA | FA / | FA | MA | FA | MA | MA | MA | MA | FA | FA | | | | | |
| | | 5.08 | | 5.24 | 5.30 | 5.11 | 5.17 | 5.01 | 5.11 | 5.26 | 5.01 | 5.42 | 5.04 | 5.38 | 5.27 | 5.71 | 5.49 | 5.46 | 5.19 | | | | | |
| 16561 | 7/ 9 | MA | FA | MA | MA | MA | MA | MA / | MA | MA | MA | FA | FA | FA | MA | FA | MA | | | | | | | |
| | | 4.86 | 4.78 | 5.31 | 5.07 | 5.34 | 5.37 | 3.61 | 4.98 | 5.39 | 5.18 | 4.79 | 4.82 | 4.85 | 5.47 | 4.78 | 5.03 | | | | | | | |
| 16562 | 6/10 | MA | MA | FA | FA | FA | FA / | FA | MA | MA | FA | FA | FA | FA | MA | MA | | | | | | | | |
| | | 6.13 | 6.04 | 5.65 | 5.45 | 5.49 | 5.27 | 4.99 | 5.90 | 5.55 | 5.39 | 5.63 | 5.58 | 5.12 | 5.37 | 5.26 | | | | | | | | |
| 16563 | 6/14 | FA | FA | MA | FA | FA / | FA | FA | MA | MA | MA | MA | FA | E | FA | MA | FA | | | | | | | |
| | | 4.70 | 4.28 | 5.12 | 4.78 | 4.98 | 3.66 | 4.70 | 4.73 | 4.74 | 4.52 | 4.87 | 4.52 | | 4.69 | 4.69 | 4.79 | | | | | | | |
| 16565 | 15/ 9 | MA | MA | MA | MA | MA | FA | FA | FA | FA | MA | MA / | FA | MA | E | MA | E | MA | MA | FA | | | | |
| | | 5.24 | 4.70 | 4.96 | 4.77 | 4.71 | 4.58 | 5.17 | 4.92 | 4.68 | 5.46 | 4.81 | 4.62 | 4.75 | | 5.16 | | 4.73 | 4.90 | 4.94 | | | | |
| 16566 | 13/ 4 | FA | MA | FA | MA | FA | MA | MA | MA | MA | FA | MA | FA | FA / | MA | MA | MA | FA | | | | | | |
| | | 4.00 | 4.89 | 4.28 | 4.81 | 3.52 | 4.60 | 4.70 | 4.66 | 4.42 | 4.27 | 4.74 | 4.68 | 4.71 | 4.55 | 4.65 | 5.21 | 4.67 | | | | | | |
| 16567 | 4/ 9 | FA | FA | MA / | MA | MA | FA | FA | MA | MA | MA | MA | FA | | | | | | | | | | | |
| | | 5.36 | 5.49 | 5.56 | 5.30 | 5.20 | 5.12 | 5.14 | 5.60 | 5.24 | 5.72 | 5.25 | 5.57 | | | | | | | | | | | |

M = MALE F = FEMALE A = ALIVE E = EARLY RESORPTION L = LATE RESORPTION "/" DENOTES POSITION OF CERVIX
CLs = CORPORA LUTEA/OVARY FETAL BODY WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE B29 (PAGE 4): FETAL SEX, VITAL STATUS AND BODY WEIGHT - INDIVIDUAL DATA - PART A

DOSAGE GROUP IV GROUP IV 1.0 MG/KG/DAY

| FETUS # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # CLs | | | | | | | | | | | | | | | | | | | | | | | |
| 16570 10/ 4 | MA | FA | MA | MA | FA | MA | MA | MA | FA / FA | | MA | MA | | | | | | | | | | | |
| | 5.05 | 5.05 | 5.23 | 4.61 | 4.84 | 5.17 | 5.65 | 5.70 | 5.38 | 5.17 | 5.73 | 5.30 | | | | | | | | | | | |
| 16571 9/ 9 | FA | FA | FA | FA | FA | FA | FA / FA | | MA | FA | FA | FA | FA | MA | MA | | | | | | | | |
| | 5.19 | 5.12 | 4.50 | 5.17 | 5.32 | 4.92 | 5.01 | 4.70 | 5.39 | 4.33 | 5.00 | 5.23 | 4.97 | 4.60 | 5.15 | | | | | | | | |
| 16574 14/10 | MA | E | MA | FA | FA | MA | MA | E / MA | | FA | FA | FA | MA | MA | FA | FA | MA | | | | | | |
| | 4.23 | | 4.27 | 4.01 | 4.00 | 4.16 | 4.55 | | 4.26 | 4.25 | 3.97 | 4.44 | 4.71 | 4.48 | 3.94 | 4.31 | 4.80 | | | | | | |
| 16575 5/11 | MA | MA | MA | FA | MA / FA | | MA | MA | FA | FA | FA | FA | FA | MA | | | | | | | | | |
| | 5.68 | 5.56 | 5.85 | 5.58 | 5.05 | 5.57 | 5.54 | 5.46 | 5.11 | 5.11 | 5.31 | 4.90 | 5.07 | 5.69 | | | | | | | | | |
| 16576 6/11 | MA | FA | FA | MA | MA | FA / MA | | MA | FA | MA | FA | FA | MA | E | FA | MA | | | | | | | |
| | 4.98 | 5.30 | 4.96 | 5.06 | 5.36 | 4.70 | 5.29 | 5.34 | 5.05 | 5.36 | 4.42 | 4.98 | 5.18 | | 4.81 | 5.62 | | | | | | | |
| 16577 9/11 | FA | E | FA | FA | FA | FA | FA | E / MA | | MA | FA | MA | MA | MA | FA | FA | MA | MA | | | | | |
| | 4.30 | | 4.82 | 4.61 | 4.51 | 4.28 | 4.80 | | 4.72 | 4.66 | 4.45 | 4.38 | 4.35 | 4.80 | 4.38 | 4.52 | 4.82 | 5.18 | | | | | |
| 16578 7/11 | MA | FA | E | FA | MA | FA | MA / MA | | MA | MA | FA | MA | FA | MA | FA | MA | MA | MA | | | | | |
| | 5.06 | 4.83 | | 4.63 | 4.98 | 4.75 | 4.69 | 5.03 | 5.11 | 4.56 | 4.69 | 4.83 | 4.57 | 4.95 | 4.65 | 4.89 | 4.73 | 5.17 | | | | | |
| 16579 6/16 | MA | MA | MA | FA | FA / FA | | FA | FA | FA | FA | FA | FA | MA | FA | FA | FA | | | | | | | |
| | 5.64 | 5.45 | 5.87 | 4.83 | 5.23 | 4.64 | 5.07 | 4.70 | 4.61 | 4.24 | 4.88 | 5.27 | 5.17 | 5.13 | 5.24 | 5.08 | | | | | | | |
| 16580 10/10 | FA | FA | MA | FA | MA | MA | FA | MA | MA / FA | | FA | FA | FA | MA | MA | E | MA | FA | | | | | |
| | 5.29 | 5.09 | 5.21 | 5.29 | 5.88 | 5.69 | 4.74 | 6.06 | 5.57 | 4.13 | 4.36 | 4.36 | 5.70 | 5.80 | 4.84 | | 5.54 | 4.78 | | | | | |
| 16581 12/10 | MA | FA | MA | FA | FA | FA | MA | FA | MA / MA | | FA | MA | MA | MA | FA | FA | MA | | | | | | |
| | 4.79 | 4.66 | 4.50 | 4.47 | 4.29 | 4.71 | 4.26 | 3.73 | 4.38 | 4.83 | 4.73 | 4.56 | 4.66 | 4.88 | 4.25 | 4.73 | 4.94 | | | | | | |
| 16582 11/10 | MA | FA | FA | MA | FA | MA | MA / FA | | FA | FA | FA | MA | MA | MA | | | | | | | | | |
| | 5.16 | 5.09 | 4.60 | 5.35 | 4.45 | 5.50 | 5.36 | 4.83 | 4.53 | 4.81 | 4.67 | 5.20 | 5.24 | 5.47 | | | | | | | | | |
| 16583 9/10 | FA | FA | FA | FA | FA | MA | FA | FA | MA / MA | | FA | FA | MA | MA | FA | FA | FA | | | | | | |
| | 5.50 | 5.30 | 5.41 | 5.42 | 5.45 | 5.45 | 5.44 | 5.42 | 6.07 | 5.56 | 4.34 | 5.78 | 5.82 | 6.05 | 5.77 | 5.15 | 5.35 | | | | | | |
| 16584 7/10 | FA | FA | MA | FA | FA | MA / MA | | FA | MA | FA | FA | FA | FA | FA | MA | MA | | | | | | | |
| | 4.13 | 4.78 | 4.91 | 4.57 | 4.43 | 5.18 | 4.49 | 4.52 | 5.00 | 4.26 | 4.55 | 4.63 | 4.69 | 4.70 | 4.69 | 4.71 | | | | | | | |
| 16587 9/ 8 | FA | FA | MA | MA | MA | MA | FA | FA | FA / MA | | FA | MA | MA | FA | FA | FA | FA | | | | | | |
| | 4.98 | 5.20 | 5.60 | 5.63 | 5.33 | 5.56 | 5.09 | 5.34 | 5.22 | 5.47 | 4.68 | 5.57 | 5.50 | 4.40 | 5.05 | 4.99 | 4.93 | | | | | | |
| 16589 10/ 9 | MA | FA | FA | MA | FA | MA | MA | MA | FA | FA / MA | | FA | FA | FA | FA | MA | FA | MA | MA | | | | |
| | 5.25 | 4.73 | 4.68 | 5.18 | 5.20 | 5.58 | 5.31 | 5.29 | 4.85 | 5.10 | 5.43 | 4.87 | 4.98 | 4.35 | 4.88 | 5.37 | 5.39 | 5.06 | 5.14 | | | | |
| 16592 9/ 9 | FA | FA | FA | FA | FA / MA | | MA | FA | MA | MA | FA | FA | FA | FA | | | | | | | | | |
| | 4.97 | 5.15 | 5.16 | 5.38 | 5.31 | 5.28 | 5.18 | 4.82 | 5.26 | 5.32 | 5.16 | 4.99 | 5.15 | 5.33 | | | | | | | | | |

M = MALE F = FEMALE A = ALIVE E = EARLY RESORPTION L = LATE RESORPTION "/" DENOTES POSITION OF CERVIX
CLs = CORPORA LUTEA/OVARY FETAL BODY WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE B29 (PAGE 5): FETAL SEX, VITAL STATUS AND BODY WEIGHT - INDIVIDUAL DATA - PART A

DOSAGE GROUP V GROUP V 30 MG/KG/DAY

| FETUS # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # CLs | | | | | | | | | | | | | | | | | | | | | | | |
| 16593 4/13 | FA | FA | MA | FA / FA | | FA | MA | FA | MA | FA | MA | MA | MA | | | | | | | | | | |
| | 5.22 | 4.67 | 5.48 | 4.55 | 4.50 | 4.90 | 5.30 | 4.62 | 5.08 | 4.80 | 5.04 | 5.61 | 5.02 | | | | | | | | | | |
| 16594 7/11 | FA | MA | FA | MA | MA | FA / FA | | FA | FA | MA | FA | MA | E | MA | FA | MA | MA | | | | | | |
| | 5.17 | 5.45 | 5.08 | 4.89 | 5.40 | 5.12 | 4.77 | 4.43 | 4.91 | 3.20 | 4.94 | 4.74 | | 5.43 | 4.95 | 4.56 | 5.14 | | | | | | |
| 16596 18/13 | E | MA | FA | FA | FA | FA | FA | MA | FA | FA | MA | FA | FA | MA / FA | | FA | FA | MA | MA | E | MA | MA | E |
| | | 4.68 | 4.52 | 4.34 | 3.34 | 4.59 | 4.38 | 4.81 | 4.30 | 4.56 | 4.86 | 4.58 | 4.28 | 4.81 | 4.68 | 4.68 | 4.99 | 4.93 | 5.05 | | 4.96 | 5.03 | |
| 16597 10/ 3 | MA | FA | MA | MA | MA | MA | MA | FA | MA | FA / MA | | FA | FA | | | | | | | | | | |
| | 5.53 | 5.18 | 5.65 | 5.85 | 5.54 | 5.47 | 5.66 | 5.08 | 5.34 | 4.92 | 5.54 | 5.29 | 5.50 | | | | | | | | | | |
| 16598 10/ 7 | MA | FA | MA | FA | FA | MA | FA | MA | FA / MA | | FA | FA | MA | MA | FA | MA | | | | | | | |
| | 4.61 | 4.98 | 5.06 | 4.98 | 5.04 | 4.94 | 4.94 | 5.46 | 4.76 | 4.68 | 4.46 | 5.08 | 4.99 | 4.63 | 4.62 | 5.29 | | | | | | | |
| 16600 12/10 | MA | FA | FA | MA | FA | FA | FA | MA | MA | FA | MA / FA | | FA | MA | MA | FA | FA | | | | | | |
| | 4.84 | 4.39 | 4.50 | 4.92 | 4.69 | 4.69 | 4.84 | 5.22 | 4.61 | 4.71 | 5.18 | 4.42 | 4.42 | 4.60 | 4.70 | 5.27 | 4.96 | | | | | | |
| 16601 10/ 7 | MA | FA | FA | MA | FA | E | MA | MA / MA | | FA | FA | FA | FA | FA | FA | | | | | | | | |
| | 4.16 | 4.83 | 4.80 | 5.07 | 5.23 | | 4.60 | 4.63 | 4.88 | 4.66 | 4.48 | 4.41 | 4.52 | 5.25 | 5.03 | | | | | | | | |
| 16602 10/ 7 | MA | FA | MA | FA | MA | FA | MA | MA | MA | MA / MA | | MA | FA | MA | FA | FA | | | | | | | |
| | 5.42 | 4.99 | 5.49 | 4.99 | 5.82 | 4.84 | 5.71 | 5.27 | 5.33 | 5.36 | 5.58 | 5.47 | 5.04 | 5.74 | 5.36 | 5.38 | | | | | | | |
| 16605 13/ 6 | MA | MA | E | FA | MA | MA | FA | FA | FA | MA / MA | | MA | MA | FA | MA | FA | | | | | | | |
| | 5.06 | 4.53 | | 4.98 | 5.12 | 5.28 | 4.96 | 4.84 | 5.04 | 4.96 | 5.22 | 5.26 | 5.28 | 5.05 | 4.94 | 5.05 | | | | | | | |
| 16606 8/10 | FA | MA | FA | FA | FA | FA | FA | MA / MA | | FA | FA | MA | FA | MA | FA | FA | | | | | | | |
| | 5.30 | 5.07 | 5.37 | 5.12 | 5.58 | 5.35 | 5.14 | 5.95 | 5.44 | 5.16 | 5.12 | 5.44 | 5.18 | 5.79 | 5.25 | 5.02 | | | | | | | |
| 16608 11/ 7 | E | MA | FA | MA | MA | FA | MA | MA | MA | MA | MA / MA | | FA | MA | MA | MA | FA | | | | | | |
| | | 4.73 | 4.55 | 5.03 | 4.92 | 4.05 | 5.32 | 4.86 | 4.29 | 5.01 | 5.29 | 5.17 | 4.56 | 5.33 | 4.92 | 5.08 | 4.62 | | | | | | |
| 16609 8/ 7 | MA | MA | FA | MA | FA | E | E | MA / FA | | MA | FA | FA | FA | MA | MA | | | | | | | | |
| | 5.28 | 5.25 | 4.82 | 5.15 | 4.91 | | | 5.27 | 4.90 | 4.78 | 4.49 | 5.02 | 4.87 | 5.14 | 5.27 | | | | | | | | |
| 16610 10/ 6 | FA | FA | MA | MA | MA | MA | FA | MA | FA | MA / MA | | FA | MA | FA | FA | | | | | | | | |
| | 5.08 | 5.32 | 5.39 | 5.55 | 5.09 | 5.56 | 5.15 | 4.80 | 4.54 | 4.75 | 5.55 | 5.46 | 6.16 | 5.11 | 4.79 | | | | | | | | |
| 16611 12/ 5 | FA | FA | FA | MA | MA | MA | MA | MA | FA | MA / MA | | FA | MA | MA | | | | | | | | | |
| | 5.39 | 5.53 | 4.69 | 5.61 | 5.62 | 5.73 | 5.91 | 5.43 | 5.42 | 6.22 | 5.75 | 5.35 | 5.69 | 5.93 | | | | | | | | | |
| 16613 11/ 8 | MA | FA | MA | MA | MA | FA | FA | MA | MA | MA / MA | | MA | FA | MA | FA | MA | MA | FA | | | | | |
| | 5.59 | 5.10 | 5.28 | 5.07 | 5.55 | 4.89 | 5.37 | 5.13 | 5.08 | 5.02 | 5.36 | 5.47 | 5.16 | 5.26 | 5.07 | 5.22 | 5.66 | 5.00 | | | | | |
| 16614 12/10 | E | FA | FA | FA | FA | MA | FA | MA | MA | E / FA | | FA | FA | MA | MA | MA | FA | | | | | | |
| | | 4.60 | 4.27 | 5.02 | 4.83 | 5.06 | 4.99 | 5.16 | 5.39 | | 4.71 | 4.82 | 4.75 | 5.11 | 5.19 | 5.61 | 4.93 | | | | | | |

M = MALE F = FEMALE A = ALIVE E = EARLY RESORPTION L = LATE RESORPTION "/" DENOTES POSITION OF CERVIX
CLs = CORPORA LUTEA/OVARY FETAL BODY WEIGHTS WERE RECORDED IN GRAMS (G).

# APPENDIX C

## REPORT TABLES - PART B

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C1 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 0.00 ± 0.00 [ 21]a | 0.01 ± 0.00 [ 21]a | 0.08 ± 0.01 [ 22]a | 0.82 ± 0.14 [ 22]a | 22.68 ± 4.04 [ 21]a |
| DAYS 7 - 14b | MEAN±S.D. | 0.00 ± 0.00 [ 20]a | 0.01 ± 0.00 [ 22]a | 0.08 ± 0.01 [ 22]a | 0.76 ± 0.13 [ 20]a | 24.40 ± 6.19 [ 22]a |
| DAYS 1 - 14b | MEAN±S.D. | 0.00 ± 0.00 [ 20]a | 0.01 ± 0.00 [ 22]a | 0.08 ± 0.01 [ 22]a | 0.78 ± 0.13 [ 20]a | 23.89 ± 5.12 [ 22]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C2 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 [ 15]a | 0.09 ± 0.01 [ 15]a | 1.01 ± 0.17 [ 14]a | 28.97 ± 3.45 |
| DAYS 6 - 9 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 [ 14]a | 0.09 ± 0.01 | 0.96 ± 0.21 [ 14]a | 28.40 ± 3.66 |
| DAYS 9 - 12 | MEAN±S.D. | 0.00 ± 0.00 [ 13]a | 0.01 ± 0.00 [ 15]a | 0.10 ± 0.02 [ 14]a | 1.10 ± 0.16 [ 13]a | 30.23 ± 3.89 [ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 | 0.10 ± 0.02 [ 14]a | 1.07 ± 0.22 [ 15]a | 31.78 ± 4.44 [ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 0.00 ± 0.00 [ 15]a | 0.01 ± 0.00 | 0.10 ± 0.02 [ 15]a | 1.20 ± 0.21 [ 15]a | 31.93 ± 4.54 [ 15]a |
| DAYS 18 - 20 | MEAN±S.D. | 0.00 ± 0.00 [ 15]b | 0.01 ± 0.00 [ 15]a | 0.08 ± 0.02 [ 15]a | 0.75 ± 0.13 | 22.57 ± 3.21 |
| DAYS 0 - 20 | MEAN±S.D. | 0.00 ± 0.00 [ 15]b | 0.01 ± 0.00 [ 15]a | 0.09 ± 0.01 [ 15]a | 0.98 ± 0.15 | 27.88 ± 2.63 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C3 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 0.00 ± 0.00<br>[ 14]a | 0.01 ± 0.00 | 0.09 ± 0.02 | 1.23 ± 0.19 | 37.06 ± 5.59 |
| DAYS 4 - 7 | MEAN±S.D. | 0.00 ± 0.00<br>[ 13]a,b | 0.01 ± 0.00 | 0.13 ± 0.02 | 1.29 ± 0.16<br>[ 15]b | 40.07 ± 5.11<br>[ 15]b |
| DAYS 7 - 10 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.14 ± 0.01 | 1.35 ± 0.16 | 41.02 ± 4.71 |
| DAYS 1 - 10 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.11 ± 0.01 | 1.26 ± 0.13 | 38.32 ± 4.60 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C4 (PAGE 1): CLINICAL AND NECROPSY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | I | II | III | IV | V |
|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| PRECOHABITATION (DAY 1 OF STUDY TO THE DAY OF COHABITATION): | | | | | |
| MAXIMUM POSSIBLE INCIDENCE | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 |
| MORTALITY | 0 | 0 | 0 | 0 | 0 |
| LOCALIZED ALOPECIA: TOTAL | 0/ 0 | 0/ 0 | 2/ 1 | 4/ 1 | 5/ 1 |
| LIMBS | 0/ 0 | 0/ 0 | 0/ 0 | 4/ 1 | 5/ 1 |
| UNDERSIDE | 0/ 0 | 0/ 0 | 2/ 1 | 0/ 0 | 0/ 0 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH THE OBSERVATION

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TABLE C4 (PAGE 2): CLINICAL AND NECROPSY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | I | II | III | IV | V |
|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| PRESUMED GESTATION: a | | | | | |
| MAXIMUM POSSIBLE INCIDENCE b | 486/ 22 | 512/ 23 | 502/ 23 | 484/ 22 | 418/ 19 |
| MORTALITY | 0 | 0 | 0 | 0 | 0 |
| LOCALIZED ALOPECIA: TOTAL | 0/ 0 | 3/ 1 | 1/ 1 | 21/ 1 | 25/ 2 |
| LIMBS | 0/ 0 | 3/ 1 | 0/ 0 | 21/ 1 | 25/ 2 |
| UNDERSIDE | 0/ 0 | 0/ 0 | 1/ 1 | 0/ 0 | 0/ 0 |
| INCISORS: MISSING/BROKEN | 0/ 0 | 6/ 1 | 2/ 1 | 0/ 0 | 6/ 1 |
| CHROMODACRYORRHEA | 0/ 0 | 0/ 0 | 0/ 0 | 22/ 1 | 0/ 0 |
| INCISORS: MISALIGNED | 0/ 0 | 0/ 0 | 0/ 0 | 21/ 1 | 0/ 0 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH THE OBSERVATION
a. Restricted to rats with a confirmed mating date.
b. Includes all rats, regardless of pregnancy status and selection.

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TABLE C4 (PAGE 3): CLINICAL AND NECROPSY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|
| LACTATION: | | | | | |
| MAXIMUM POSSIBLE INCIDENCE a | 209/ 21 | 210/ 21 | 226/ 23 | 220/ 22 | 180/ 18 |
| MORTALITY | 0 | 0 | 0 | 0 | 0 |
| LOCALIZED ALOPECIA: TOTAL | 7/ 1 | 10/ 1 | 7/ 1 | 12/ 2 | 20/ 2 |
| LIMBS | 7/ 1 | 10/ 1 | 7/ 1 | 12/ 2 | 20/ 2 |
| CHROMODACRYORRHEA | 0/ 0 | 0/ 0 | 0/ 0 | 10/ 1 | 0/ 0 |
| INCISORS: MISALIGNED | 0/ 0 | 0/ 0 | 0/ 0 | 10/ 1 | 0/ 0 |

PERSISTENT ADVERSE CLINICAL OBSERVATIONS WERE CONFIRMED AT NECROPSY, NO ADDITIONAL GROSS LESIONS WERE IDENTIFIED

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH THE OBSERVATION
a. Includes all rats, regardless of selection.

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TABLE C5 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHT (G) | | | | | | |
| DAY 1 | MEAN±S.D | 242.3 ± 14.2 | 243.1 ± 13.7 | 243.4 ± 12.6 | 240.3 ± 12.9 | 243.5 ± 13.1 |
| DAY 2 | MEAN±S.D | 239.5 ± 14.4 | 241.8 ± 14.3 | 241.3 ± 12.7 | 240.7 ± 14.2 | 242.0 ± 12.4 |
| DAY 3 | MEAN±S.D | 244.0 ± 14.5 | 246.6 ± 15.3 | 246.0 ± 14.8 | 246.5 ± 15.2 | 247.0 ± 12.9 |
| DAY 4 | MEAN±S.D | 245.6 ± 14.4 | 248.0 ± 14.9 | 246.3 ± 14.3 | 248.2 ± 15.2 | 247.3 ± 14.7 |
| DAY 5 | MEAN±S.D | 247.3 ± 15.7 | 247.9 ± 13.6 | 247.6 ± 15.0 | 246.3 ± 14.3 | 248.1 ± 14.3 |
| DAY 6 | MEAN±S.D | 247.9 ± 15.7 | 253.0 ± 15.0 | 251.1 ± 16.0 | 252.4 ± 14.8 | 251.6 ± 14.1 |
| DAY 7 | MEAN±S.D | 246.3 ± 15.2 | 250.0 ± 14.8 | 248.2 ± 15.7 | 249.8 ± 14.7 | 248.5 ± 14.4 |
| DAY 8 | MEAN±S.D | 255.7 ± 17.0 | 256.8 ± 15.3 | 254.9 ± 16.1 | 255.7 ± 16.1 | 254.8 ± 16.8 |
| DAY 9 | MEAN±S.D | 250.3 ± 15.9 | 253.2 ± 14.4 | 252.1 ± 15.8 | 251.5 ± 15.1 | 251.6 ± 15.7 |
| DAY 10 | MEAN±S.D | 250.3 ± 14.9 | 254.9 ± 15.5 | 253.6 ± 15.2 | 255.4 ± 15.2 | 254.2 ± 15.0 |
| DAY 11 | MEAN±S.D | 251.0 ± 16.1 | 256.3 ± 16.9 | 252.3 ± 17.7 | 256.2 ± 16.6 | 252.5 ± 16.3 |
| DAY 12 | MEAN±S.D | 253.1 ± 17.4 | 256.1 ± 17.3 | 254.7 ± 19.0 | 256.6 ± 16.8 | 253.0 ± 16.3 |
| DAY 13 | MEAN±S.D | 252.2 ± 17.3 | 255.3 ± 16.8 | 256.1 ± 17.6 | 254.7 ± 17.5 | 254.8 ± 16.6 |
| DAY 14a | MEAN±S.D | 252.3 ± 17.8 | 256.3 ± 17.2 | 256.7 ± 17.3 | 258.3 ± 17.1 | 256.7 ± 15.7 |

DAY = DAY OF STUDY
a. Last value recorded before cohabitation.

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TABLE C6 (PAGE 1): BODY WEIGHT CHANGES - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | +3.9 ± 7.2 | +7.0 ± 8.6 | +4.8 ± 7.9 | +9.6 ± 4.8 | +5.0 ± 6.5 |
| DAYS 7 - 14a | MEAN±S.D. | +6.1 ± 5.6 | +6.3 ± 5.6 | +8.6 ± 4.6 | +8.5 ± 6.1 | +8.2 ± 5.0 |
| DAYS 1 - 14a | MEAN±S.D. | +10.0 ± 8.5 | +13.2 ± 11.9 | +13.3 ± 8.8 | +18.1 ± 7.8 | +13.3 ± 8.7 |

DAYS = DAYS OF STUDY
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C7 (PAGE 1): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 0 | MEAN±S.D. | 263.2 ± 20.6 | 263.2 ± 15.9 | 260.2 ± 14.2 | 259.0 ± 21.4 | 264.9 ± 19.0 |
| DAY 1 | MEAN±S.D. | 272.6 ± 20.4 | 269.4 ± 17.8 | 268.2 ± 13.8 | 266.9 ± 19.7 | 270.9 ± 20.4 |
| DAY 2 | MEAN±S.D. | 278.3 ± 21.0 | 277.4 ± 17.4 | 273.8 ± 13.2 | 274.0 ± 19.7 | 276.7 ± 20.6 |
| DAY 3 | MEAN±S.D. | 283.6 ± 20.4 | 281.8 ± 18.3 | 278.0 ± 14.6 | 280.8 ± 19.2 | 283.9 ± 22.5 |
| DAY 4 | MEAN±S.D. | 284.3 ± 20.7 | 286.1 ± 17.9 | 284.3 ± 14.9 | 283.2 ± 19.4 | 287.9 ± 22.0 |
| DAY 5 | MEAN±S.D. | 289.1 ± 20.3 | 288.9 ± 17.1 | 287.5 ± 15.3 | 284.5 ± 19.2 | 289.8 ± 21.9 |
| DAY 6 | MEAN±S.D. | 292.5 ± 22.8 | 291.4 ± 18.1 | 289.6 ± 15.2 | 285.9 ± 18.5 | 292.7 ± 22.6 |
| DAY 7 | MEAN±S.D. | 295.8 ± 20.9 | 295.8 ± 19.6 | 295.9 ± 14.4 | 295.6 ± 18.0 | 299.0 ± 24.0 |
| DAY 8 | MEAN±S.D. | 298.9 ± 22.5 | 298.9 ± 19.8 | 298.4 ± 14.5 | 296.7 ± 18.7 | 302.9 ± 23.1 |
| DAY 9 | MEAN±S.D. | 304.1 ± 22.1 | 303.2 ± 18.9 | 302.9 ± 15.8 | 300.9 ± 19.4 | 305.5 ± 22.1 |
| DAY 10 | MEAN±S.D. | 309.0 ± 23.6 | 308.4 ± 20.1 | 306.3 ± 14.3 | 305.6 ± 19.3 | 309.7 ± 22.6 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C7 (PAGE 2): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 11 | MEAN±S.D. | 317.8 ± 23.0 | 315.6 ± 22.2 | 312.4 ± 14.3 | 313.9 ± 17.2 | 316.8 ± 23.1 |
| DAY 12 | MEAN±S.D. | 323.9 ± 25.2 | 320.6 ± 23.9 | 318.2 ± 15.1 | 319.8 ± 19.6 | 323.1 ± 24.2 |
| DAY 13 | MEAN±S.D. | 326.8 ± 25.6 | 326.6 ± 24.3 | 322.9 ± 16.4 | 324.8 ± 22.2 | 326.3 ± 22.8 |
| DAY 14 | MEAN±S.D. | 331.2 ± 26.9 | 329.6 ± 23.0 | 325.5 ± 17.0 | 327.2 ± 23.7 | 330.4 ± 23.7 |
| DAY 15 | MEAN±S.D. | 338.1 ± 26.8 | 337.0 ± 25.2 | 333.5 ± 18.4 | 335.3 ± 23.4 | 337.3 ± 24.7 |
| DAY 16 | MEAN±S.D. | 346.0 ± 26.4 | 345.2 ± 24.9 | 343.0 ± 18.1 | 345.7 ± 23.8 | 347.2 ± 23.5 |
| DAY 17 | MEAN±S.D. | 361.6 ± 29.6 | 356.2 ± 26.0 | 355.8 ± 18.7 | 357.9 ± 24.8 | 359.3 ± 23.7 |
| DAY 18 | MEAN±S.D. | 375.8 ± 30.9 | 372.4 ± 26.4 | 370.4 ± 19.8 | 374.9 ± 27.5 | 373.8 ± 24.7 |
| DAY 19 | MEAN±S.D. | 388.2 ± 32.9 | 381.6 ± 28.0 | 384.4 ± 21.1 | 387.8 ± 27.7 | 389.1 ± 24.0 |
| DAY 20 | MEAN±S.D. | 402.4 ± 31.9 | 397.8 ± 28.5 | 398.6 ± 23.1 | 401.1 ± 26.7 | 402.8 ± 26.5 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C8 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | +29.2 ± 10.8 | +28.2 ± 7.6 | +29.4 ± 4.8 | +26.9 ± 10.1 | +27.8 ± 6.1 |
| DAYS 6 - 9 | MEAN±S.D. | +11.6 ± 5.9 | +11.8 ± 4.8 | +13.3 ± 3.6 | +15.1 ± 3.0 | +12.8 ± 4.4 |
| DAYS 9 - 12 | MEAN±S.D. | +19.8 ± 6.5 | +17.4 ± 6.5 | +15.2 ± 4.5 | +18.8 ± 4.1 | +17.6 ± 5.8 |
| DAYS 12 - 15 | MEAN±S.D. | +14.2 ± 5.9 | +16.4 ± 7.3 | +15.3 ± 7.8 | +15.6 ± 7.0 | +14.2 ± 3.8 |
| DAYS 15 - 18 | MEAN±S.D. | +37.6 ± 8.4 | +35.4 ± 6.0 | +36.9 ± 5.7 | +39.6 ± 7.8 | +36.5 ± 5.8 |
| DAYS 18 - 20 | MEAN±S.D. | +26.7 ± 5.5 | +25.4 ± 7.2 | +28.2 ± 6.4 | +26.1 ± 5.0 | +29.0 ± 7.2 |
| DAYS 0 - 20 | MEAN±S.D. | +139.2± 16.6 | +134.6± 16.9 | +138.4± 14.6 | +142.1± 14.9 | +137.9± 13.1 |

DAYS = DAYS OF GESTATION

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TABLE C9 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 1 | MEAN±S.D. | 302.2 ± 18.4 | 305.0 ± 21.2 | 304.6 ± 18.0 | 301.5 ± 23.0 | 306.5 ± 22.8 |
| DAY 2 | MEAN±S.D. | 306.4 ± 20.9 | 303.8 ± 21.0 | 297.4 ± 15.6 | 300.9 ± 19.7 | 304.2 ± 21.2 |
| DAY 3 | MEAN±S.D. | 308.8 ± 21.6 | 306.4 ± 22.3 | 299.4 ± 15.7 | 306.9 ± 20.0 | 306.6 ± 20.9 |
| DAY 4 | MEAN±S.D. | 309.8 ± 19.8 | 311.7 ± 24.1 | 304.7 ± 17.4 | 309.5 ± 18.7 | 311.4 ± 20.5 |
| DAY 5 | MEAN±S.D. | 309.3 ± 20.7 | 312.4 ± 23.1 | 301.5 ± 18.2 | 307.4 ± 19.6 | 311.3 ± 21.6 |
| DAY 6 | MEAN±S.D. | 318.2 ± 23.5 | 315.0 ± 22.9 | 307.8 ± 18.7 | 312.1 ± 24.6 | 312.6 ± 23.0 |
| DAY 7 | MEAN±S.D. | 320.0 ± 20.5 | 318.8 ± 22.9 | 310.4 ± 18.3 | 316.7 ± 22.0 | 314.8 ± 18.9 |
| DAY 8 | MEAN±S.D. | 323.2 ± 16.9 | 320.4 ± 22.8 | 312.6 ± 19.2 | 317.2 ± 18.9 | 320.2 ± 19.5 |
| DAY 9 | MEAN±S.D. | 328.8 ± 16.6 | 326.1 ± 23.4 | 318.7 ± 16.9 | 323.2 ± 20.6 | 324.4 ± 21.3 |
| DAY 10 | MEAN±S.D. | 343.6 ± 20.8 | 339.8 ± 22.0 | 330.9 ± 20.6 | 330.8 ± 27.4 | 340.2 ± 21.2 |

DAY = DAY OF LACTATION

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TABLE C10 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | +7.6 ± 8.9 | +6.7 ± 9.0 | +0.1 ± 13.0 | +8.0 ± 10.8 | +4.9 ± 12.0 |
| DAYS 4 - 7 | MEAN±S.D. | +10.2 ± 8.9 | +7.1 ± 9.4 | +5.7 ± 8.2 | +7.2 ± 7.7 | +3.4 ± 6.1 |
| DAYS 7 - 10 | MEAN±S.D. | +23.6 ± 10.4 | +21.1 ± 7.4 | +20.5 ± 12.0 | +14.1 ± 14.3* | +25.4 ± 8.7 |
| DAYS 1 - 10 | MEAN±S.D. | +41.4 ± 19.5 | +34.8 ± 11.1 | +26.2 ± 19.2 | +29.2 ± 16.6 | +33.7 ± 14.9 |

DAYS = DAYS OF LACTATION
* Significantly different from the carrier group value ($p \leq 0.05$).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C11 (PAGE 1): ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 27.5 ± 4.5 [ 21]a | 30.6 ± 4.4 [ 21]a | 28.8 ± 6.0 [ 22]a | 30.6 ± 5.2 [ 22]a | 28.4 ± 5.3 [ 21]a |
| DAYS 7 - 14b | MEAN±S.D. | 28.5 ± 5.0 [ 20]a | 31.9 ± 4.9 [ 22]a | 30.5 ± 6.8 [ 22]a | 29.6 ± 4.9 [ 20]a | 31.2 ± 8.3 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 28.0 ± 4.6 [ 20]a | 31.3 ± 4.2 [ 22]a | 29.7 ± 6.2 [ 22]a | 29.9 ± 4.8 [ 20]a | 30.2 ± 6.9 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C12 (PAGE 1): RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 112.4 ± 16.1 [ 21]a | 123.2 ± 17.3 [ 21]a | 116.4 ± 20.9 [ 22]a | 124.5 ± 20.6 [ 22]a | 115.0 ± 20.5 [ 21]a |
| DAYS 7 - 14b | MEAN±S.D. | 112.6 ± 16.1 [ 20]a | 124.7 ± 16.6 [ 22]a | 119.6 ± 23.1 [ 22]a | 117.0 ± 20.2 [ 20]a | 123.5 ± 31.4 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 112.0 ± 15.0 [ 20]a | 124.2 ± 14.9 [ 22]a | 117.9 ± 20.7 [ 22]a | 119.9 ± 19.7 [ 20]a | 121.2 ± 26.5 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.

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TABLE C13 (PAGE 1): MATERNAL ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 39.8 ± 6.3<br>[ 14]a | 41.3 ± 8.0<br>[ 15]a | 41.4 ± 5.2<br>[ 15]a | 42.1 ± 5.7<br>[ 14]a | 42.0 ± 6.1 |
| DAYS 6 - 9 | MEAN±S.D. | 42.1 ± 6.8<br>[ 14]a | 44.6 ± 5.9<br>[ 14]a | 45.3 ± 6.8 | 42.5 ± 8.3<br>[ 14]a | 43.7 ± 6.8 |
| DAYS 9 - 12 | MEAN±S.D. | 45.8 ± 6.9<br>[ 13]a | 47.5 ± 6.8<br>[ 15]a | 47.0 ± 6.6<br>[ 14]a | 47.9 ± 6.1<br>[ 13]a | 45.6 ± 6.9<br>[ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 45.9 ± 7.0<br>[ 14]a | 49.6 ± 6.7 | 48.9 ± 8.2<br>[ 14]a | 46.8 ± 9.8<br>[ 15]a | 48.0 ± 7.3<br>[ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 49.4 ± 6.9<br>[ 15]a | 53.6 ± 8.6 | 52.2 ± 9.5<br>[ 15]a | 55.6 ± 7.8<br>[ 15]a | 51.7 ± 7.3<br>[ 15]a |
| DAYS 18 - 20 | MEAN±S.D. | 45.7 ± 10.0<br>[ 15]b | 50.4 ± 7.8<br>[ 15]a | 46.6 ± 10.0<br>[ 15]a | 43.4 ± 6.6 | 43.8 ± 4.6 |
| DAYS 0 - 20 | MEAN±S.D. | 45.4 ± 8.1<br>[ 15]b | 47.5 ± 6.1<br>[ 15]a | 45.8 ± 5.8<br>[ 15]a | 46.8 ± 6.4 | 45.2 ± 4.9 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE C14 (PAGE 1): MATERNAL RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 140.8 ± 18.0<br>[ 14]a | 148.1 ± 28.2<br>[ 15]a | 148.4 ± 15.6<br>[ 15]a | 153.4 ± 25.9<br>[ 14]a | 149.2 ± 17.8 |
| DAYS 6 - 9 | MEAN±S.D. | 140.0 ± 18.4<br>[ 14]a | 151.4 ± 18.1<br>[ 14]a | 152.4 ± 20.9 | 144.4 ± 31.0<br>[ 14]a | 145.5 ± 18.8 |
| DAYS 9 - 12 | MEAN±S.D. | 145.2 ± 19.8<br>[ 13]a | 152.8 ± 19.9<br>[ 15]a | 151.5 ± 20.0<br>[ 14]a | 154.8 ± 23.0<br>[ 13]a | 145.2 ± 18.7<br>[ 15]a |
| DAYS 12 - 15 | MEAN±S.D. | 137.8 ± 18.6<br>[ 14]a | 151.4 ± 21.6 | 150.4 ± 21.2<br>[ 14]a | 142.1 ± 29.2<br>[ 15]a | 146.5 ± 20.5<br>[ 15]a |
| DAYS 15 - 18 | MEAN±S.D. | 138.2 ± 19.5<br>[ 15]a | 152.4 ± 26.4 | 149.1 ± 27.4<br>[ 15]a | 159.1 ± 27.7<br>[ 15]a | 147.2 ± 20.9<br>[ 15]a |
| DAYS 18 - 20 | MEAN±S.D. | 118.2 ± 31.6<br>[ 15]b | 131.2 ± 20.6<br>[ 15]a | 120.2 ± 23.2<br>[ 15]a | 112.5 ± 19.9 | 113.3 ± 16.1 |
| DAYS 0 - 20 | MEAN±S.D. | 142.9 ± 29.7<br>[ 15]b | 150.2 ± 18.8<br>[ 15]a | 144.6 ± 14.9<br>[ 15]a | 149.0 ± 23.0 | 142.1 ± 13.4 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE C15 (PAGE 1): MATERNAL ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 48.8 ± 10.0 [ 14]a | 48.7 ± 5.9 | 45.7 ± 10.6 | 46.5 ± 6.0 | 45.0 ± 8.3 |
| DAYS 4 - 7 | MEAN±S.D. | 67.6 ± 14.7 [ 13]a,b | 62.6 ± 6.7 | 58.9 ± 9.7 | 59.6 ± 7.1 [ 15]b | 60.2 ± 8.0 [ 15]b |
| DAYS 7 - 10 | MEAN±S.D. | 70.2 ± 11.8 | 67.2 ± 7.0 | 66.4 ± 8.4 | 63.4 ± 11.4 | 68.6 ± 8.1 |
| DAYS 1 - 10 | MEAN±S.D. | 62.4 ± 10.3 | 59.5 ± 5.1 | 57.0 ± 7.5 | 56.8 ± 6.1 | 58.0 ± 7.1 |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE C16 (PAGE 1): MATERNAL RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 158.4 ± 28.4 [ 14]a | 159.4 ± 21.0 | 151.2 ± 32.8 | 153.8 ± 25.9 | 146.8 ± 26.2 |
| DAYS 4 - 7 | MEAN±S.D. | 215.3 ± 51.5 [ 13]a,b | 200.4 ± 28.6 | 192.0 ± 26.2 | 190.5 ± 25.0 [ 15]b | 193.6 ± 23.3 [ 15]b |
| DAYS 7 - 10 | MEAN±S.D. | 213.8 ± 36.6 | 207.0 ± 26.3 | 209.0 ± 24.8 | 197.6 ± 37.5 | 211.3 ± 21.8 |
| DAYS 1 - 10 | MEAN±S.D. | 197.2 ± 34.2 | 189.3 ± 21.4 | 184.5 ± 21.0 | 182.7 ± 24.7 | 184.2 ± 20.1 |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE C17 (PAGE 1): ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 17.6 ± 2.0 | 18.3 ± 2.0 | 18.3 ± 2.3 | 18.8 ± 1.5 | 18.7 ± 2.1 |
| DAYS 7 - 14a | MEAN±S.D. | 18.1 ± 2.3 | 18.9 ± 2.2 [ 22]b | 18.7 ± 2.4 [ 22]b | 18.3 ± 1.6 [ 22]c | 18.5 ± 1.8 |
| DAYS 1 - 14a | MEAN±S.D. | 17.9 ± 2.0 | 18.7 ± 1.8 [ 22]b | 18.5 ± 2.1 [ 22]b | 18.5 ± 1.5 [ 22]c | 18.6 ± 1.8 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Last value recorded before cohabitation.
b. Excludes values that were incorrectly recorded.
c. Excludes values that were not recorded.

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TABLE C18 (PAGE 1): RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 71.9 ± 6.6 | 74.0 ± 7.0 | 74.2 ± 6.3 | 76.6 ± 5.4 | 75.6 ± 6.4 |
| DAYS 7 - 14a | MEAN±S.D. | 71.8 ± 7.3 | 74.0 ± 7.6 [ 22]b | 74.0 ± 7.5 [ 22]b | 71.8 ± 5.2 [ 22]c | 73.0 ± 4.5 |
| DAYS 1 - 14a | MEAN±S.D. | 71.9 ± 6.0 | 74.1 ± 5.9 [ 22]b | 74.1 ± 5.6 [ 22]b | 73.8 ± 5.0 [ 22]c | 74.2 ± 5.1 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Last value recorded before cohabitation.
b. Excludes values that were incorrectly recorded.
c. Excludes values that were not recorded.

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TABLE C19 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 23.0 ± 2.4 | 23.2 ± 2.1 | 23.3 ± 1.5 | 23.9 ± 2.4 [ 15]a | 23.9 ± 3.4 |
| DAYS 6 - 9 | MEAN±S.D. | 24.9 ± 2.9 | 24.3 ± 2.2 | 24.8 ± 1.6 | 24.8 ± 2.5 [ 15]b | 25.2 ± 3.4 |
| DAYS 9 - 12 | MEAN±S.D. | 25.8 ± 3.8 | 25.8 ± 3.3 | 25.5 ± 1.8 | 26.4 ± 2.4 | 26.2 ± 2.4 |
| DAYS 12 - 15 | MEAN±S.D. | 25.7 ± 3.1 | 25.1 ± 2.9 | 24.8 ± 2.4 | 25.1 ± 3.3 | 24.1 ± 2.3 |
| DAYS 15 - 18 | MEAN±S.D. | 27.6 ± 3.4 | 26.3 ± 2.9 | 26.0 ± 2.7 | 28.4 ± 2.7 | 26.0 ± 2.7 |
| DAYS 18 - 20 | MEAN±S.D. | 23.5 ± 3.7 | 23.8 ± 3.6 | 23.8 ± 3.5 | 23.8 ± 3.0 | 22.8 ± 2.6 |
| DAYS 0 - 20 | MEAN±S.D. | 24.8 ± 2.4 | 24.6 ± 2.2 | 24.6 ± 1.5 | 25.1 ± 2.2 | 24.7 ± 2.3 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were incorrectly recorded.
b. Excludes values that were associated with spillage.

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TABLE C20 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 82.0 ± 6.1 | 83.1 ± 6.0 | 84.1 ± 4.7 | 86.6 ± 7.8 [ 15]a | 85.0 ± 7.2 |
| DAYS 6 - 9 | MEAN±S.D. | 83.7 ± 7.3 | 81.6 ± 5.0 | 83.8 ± 3.5 | 84.0 ± 7.4 [ 15]b | 83.8 ± 7.0 |
| DAYS 9 - 12 | MEAN±S.D. | 82.0 ± 8.6 | 82.3 ± 6.9 | 82.2 ± 4.0 | 85.3 ± 7.6 | 83.5 ± 4.9 |
| DAYS 12 - 15 | MEAN±S.D. | 77.8 ± 6.6 | 76.4 ± 6.3 | 76.3 ± 6.1 | 76.8 ± 7.3 | 73.3 ± 5.7 |
| DAYS 15 - 18 | MEAN±S.D. | 77.4 ± 6.3 | 74.6 ± 6.6 | 74.0 ± 6.7 | 80.4 ± 5.6 | 73.4 ± 5.2 |
| DAYS 18 - 20 | MEAN±S.D. | 60.6 ± 9.3 | 62.1 ± 10.1 | 61.9 ± 7.5 | 61.6 ± 8.1 | 58.9 ± 7.3 |
| DAYS 0 - 20 | MEAN±S.D. | 78.0 ± 4.7 | 77.6 ± 4.8 | 78.0 ± 3.0 | 79.8 ± 5.8 | 77.5 ± 3.8 |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were incorrectly recorded.
b. Excludes values that were associated with spillage.

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TABLE C21 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 31.0 ± 5.1 | 29.6 ± 4.3 [ 14]a,b | 28.6 ± 7.9 [ 15]a | 28.4 ± 4.4 [ 15]b | 26.9 ± 5.1 |
| DAYS 4 - 7 | MEAN±S.D. | 42.8 ± 5.1 | 41.5 ± 5.2 [ 15]c | 38.7 ± 8.4 [ 15]a | 41.6 ± 6.5 | 39.5 ± 3.9 |
| DAYS 7 - 10 | MEAN±S.D. | 48.1 ± 6.1 | 45.2 ± 4.2 [ 14]b,c | 45.5 ± 4.6 [ 15]b | 46.4 ± 4.7 | 46.3 ± 4.0 [ 15]c |
| DAYS 1 - 10 | MEAN±S.D. | 40.7 ± 4.4 | 38.9 ± 3.0 [ 14]b,c | 37.6 ± 5.7 [ 15]b | 39.0 ± 4.1 | 37.3 ± 3.6 [ 15]c |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were not recorded.
b. Excludes values that were incorrectly recorded.
c. Excludes values that were associated with spillage.

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TABLE C22 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 16 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 101.4 ± 16.1 | 96.7 ± 14.9 [ 14]a,b | 95.2 ± 24.8 [ 15]a | 93.7 ± 17.2 [ 15]b | 87.7 ± 16.5 |
| DAYS 4 - 7 | MEAN±S.D. | 136.4 ± 14.2 | 133.4 ± 21.7 [ 15]c | 124.7 ± 23.4 [ 15]a | 134.4 ± 23.5 | 126.3 ± 9.6 |
| DAYS 7 - 10 | MEAN±S.D. | 146.4 ± 17.1 | 139.0 ± 13.7 [ 14]b,c | 143.7 ± 14.9 [ 15]b | 144.7 ± 18.0 | 143.1 ± 8.4 [ 15]c |
| DAYS 1 - 10 | MEAN±S.D. | 128.4 ± 12.6 | 123.9 ± 12.1 [ 14]b,c | 121.9 ± 16.4 [ 15]b | 125.3 ± 17.1 | 119.1 ± 9.8 [ 15]c |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were not recorded.
b. Excludes values that were incorrectly recorded.
c. Excludes values that were associated with spillage.

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TABLE C23 (PAGE 1): NATURAL DELIVERY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS ASSIGNED TO NATURAL DELIVERY AND EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PREGNANT | N(%) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) |
| DELIVERED LITTERS | N(%) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) | 16(100.0) |
| DURATION OF GESTATION a | MEAN±S.D. | 22.6 ± 0.5 | 22.7 ± 0.5 | 22.7 ± 0.5 | 22.9 ± 0.3 | 22.6 ± 0.5 |
| IMPLANTATION SITES | N | 264 | 260 | 246 | 267 | 238 |
| PER DELIVERED LITTER | MEAN±S.D. | 16.5 ± 2.4 | 16.2 ± 1.7 | 16.4 ± 1.0<br>[ 15]b | 16.7 ± 2.5 | 15.9 ± 1.8<br>[ 15]b |
| DAMS WITH STILLBORN PUPS | N(%) | 1( 6.2) | 1( 6.2) | 2( 12.5) | 0( 0.0) | 2( 12.5) |
| GESTATION INDEX c | %<br>N/N | 100.0<br>16/ 16 | 100.0<br>16/ 16 | 100.0<br>16/ 16 | 100.0<br>16/ 16 | 100.0<br>16/ 16 |

[ ] = NUMBER OF VALUES AVERAGED

a. Calculated as the time (in days) elapsed between confirmed mating (arbitrarily defined as day 0) and the time (in days) the first pup was delivered.

b. Excludes values that were not recorded or incorrectly recorded.

c. Number of rats with live offspring/number of pregnant rats.

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TABLE C24 (PAGE 1): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 16 | 16 | 16 |
| PUPS DELIVERED (TOTAL) | N | 251 | 241 | 244 | 246 | 239 |
| | MEAN±S.D. | 15.7 ± 2.5 | 15.1 ± 2.0 | 15.2 ± 1.1 | 15.4 ± 2.6 | 14.9 ± 1.9 |
| LIVEBORN | MEAN±S.D. | 15.6 ± 2.6 | 15.0 ± 1.9 | 15.1 ± 1.2 | 15.4 ± 2.6 | 14.8 ± 1.8 |
| | N(%) | 250( 99.6) | 240( 99.6) | 241( 98.8) | 246(100.0) | 236( 98.7) |
| STILLBORN | MEAN±S.D. | 0.1 ± 0.2 | 0.1 ± 0.2 | 0.1 ± 0.3 | 0.0 ± 0.0 | 0.2 ± 0.5 |
| | N(%) | 1( 0.4) | 1( 0.4) | 2( 0.8) | 0( 0.0) | 3( 1.2) |
| UNKNOWN VITAL STATUS | N | 0 | 0 | 1 | 0 | 0 |
| CULLED | N | 117 | 104 | 101 | 111 | 106 |
| PUPS FOUND DEAD OR PRESUMED CANNIBALIZED | | | | | | |
| DAY 1 | N/N(%) | 0/250( 0.0) | 0/240( 0.0) | 3/241( 1.2) | 3/246( 1.2) | 0/236( 0.0) |
| DAYS 2- 5 | N/N(%) | 5/250( 2.0) | 8/240( 3.3) | 9/238( 3.8) | 4/243( 1.6) | 2/236( 0.8) |
| DAYS 6- 8 | N/N(%) | 1/128( 0.8) | 0/128( 0.0) | 1/128( 0.8) | 1/128( 0.8) | 0/128( 0.0) |
| DAYS 9-10 | N/N(%) | 0/127( 0.0) | 0/128( 0.0) | 0/127( 0.0) | 0/127( 0.0) | 0/128( 0.0) |
| VIABILITY INDEX a | % | 98.0 | 96.7 | 95.0 | 97.2 | 99.2 |
| | N/N | 245/250 | 232/240 | 229/241 | 239/246 | 234/236 |
| LACTATION INDEX b | % | 99.2 | 100.0 | 99.2 | 99.2 | 100.0 |
| | N/N | 127/128 | 128/128 | 127/128 | 127/128 | 128/128 |

DAY(S) = DAY(S) POSTPARTUM
a. Number of live pups on day 5(preculling) postpartum/number of liveborn pups on day 1 postpartum.
b. Number of live pups on day 10(weaning) postpartum/number of live pups on day 5(postculling) postpartum.

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TABLE C24 (PAGE 2): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 16 | 16 | 16 |
| SURVIVING PUPS/LITTER a | | | | | | |
| DAY 1 b | MEAN±S.D. | 15.6 ± 2.6 | 15.0 ± 1.9 | 15.1 ± 1.2 | 15.4 ± 2.6 | 14.8 ± 1.8 |
| DAY 5 PRECULLING | MEAN±S.D. | 15.3 ± 2.4 | 14.5 ± 1.8 | 14.3 ± 1.4 | 14.9 ± 2.4 | 14.6 ± 1.8 |
| DAY 5 POSTCULLING | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 |
| DAY 8 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 7.9 ± 0.2 | 8.0 ± 0.0 |
| DAY 10 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 7.9 ± 0.2 | 8.0 ± 0.0 |
| PERCENT MALE PUPS PER NUMBER OF PUPS SEXED | | | | | | |
| DAY 1 b | MEAN±S.D. | 48.3 ± 14.2 | 49.3 ± 10.2 | 50.7 ± 13.1 | 51.8 ± 14.2 | 53.0 ± 11.0 |
| DAY 5 PRECULLING | MEAN±S.D. | 49.0 ± 14.8 | 49.3 ± 10.6 | 50.0 ± 13.4 | 51.8 ± 15.1 | 53.6 ± 11.9 |
| DAY 5 POSTCULLING | MEAN±S.D. | 48.4 ± 7.7 | 48.4 ± 4.3 | 49.2 ± 7.2 | 53.1 ± 11.6 | 52.3 ± 5.0 |
| DAY 8 | MEAN±S.D. | 48.0 ± 7.8 | 48.4 ± 4.3 | 48.8 ± 7.3 | 53.6 ± 11.6 | 52.3 ± 5.0 |
| DAY 10 | MEAN±S.D. | 48.0 ± 7.8 | 48.4 ± 4.3 | 48.8 ± 7.3 | 53.6 ± 11.6 | 52.3 ± 5.0 |

DAY = DAY POSTPARTUM
a. Average number of live pups per litter, including litters with no surviving pups.
b. Includes pups born alive, found dead day 1 postpartum.

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TABLE C24 (PAGE 3): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 16 | 16 | 16 |
| LIVE LITTER SIZE AT WEIGHING | | | | | | |
| DAY 1 | MEAN±S.D. | 15.6 ± 2.6 | 15.0 ± 1.9 | 14.9 ± 1.0 | 15.2 ± 2.4 | 14.8 ± 1.8 |
| DAY 5 PRECULLING | MEAN±S.D. | 15.3 ± 2.4 | 14.5 ± 1.8 | 14.3 ± 1.4 | 14.9 ± 2.4 | 14.6 ± 1.8 |
| DAY 5 POSTCULLING | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.0 ± 0.0 |
| DAY 8 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 7.9 ± 0.2 | 8.0 ± 0.0 |
| DAY 10 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 |
| PUP WEIGHT/LITTER (GRAMS) | | | | | | |
| DAY 1 | MEAN±S.D. | 6.1 ± 0.5 | 6.2 ± 0.5 | 6.2 ± 0.3 | 6.3 ± 0.4 | 6.1 ± 0.6 |
| DAY 5 PRECULLING | MEAN±S.D. | 9.1 ± 1.1 | 8.9 ± 0.7 | 8.6 ± 0.9 | 9.2 ± 1.1 | 8.9 ± 1.2 |
| DAY 5 POSTCULLING | MEAN±S.D. | 9.2 ± 1.0 | 9.0 ± 0.6 | 8.6 ± 1.0 | 9.1 ± 1.1 | 8.9 ± 1.2 |
| DAY 8 | MEAN±S.D. | 15.5 ± 1.8 | 14.1 ± 2.0 | 13.6 ± 1.9 | 14.9 ± 1.7 | 14.6 ± 1.8 |
| DAY 10 | MEAN±S.D. | 19.6 ± 2.4 | 18.0 ± 2.4 | 17.4 ± 2.3 | 19.0 ± 2.1 | 18.7 ± 2.3 |

DAY = DAY POSTPARTUM

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TABLE C25 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 10 POSTPARTUM - SUMMARY - F1 GENERATION PUPS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| LITTERS EXAMINED (N) | | 16 | 16 | 16 | 16 | 16 |
| TRANSIENT CLINICAL OBSERVATIONS: a | | | | | | |
| COLD TO TOUCH | N/N | 0/ 0 | 0/ 0 | 1/ 1 | 0/ 0 | 0/ 0 |
| PERSISTENT CLINICAL OBSERVATIONS: a | | | | | | |
| TIP OF TAIL BLACK | N/N | 0/ 0 | 0/ 0 | 5/ 1 | 0/ 0 | 0/ 0 |
| TIP OF TAIL MISSING | N/N | 0/ 0 | 0/ 0 | 10/ 1 | 0/ 0 | 0/ 0 |
| LEFT HINDPAW, 4TH DIGIT MISSING | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 5/ 1 |

STATISTICAL ANALYSES WERE RESTRICTED TO THE NUMBER OF LITTERS WITH OBSERVATIONS.
N/N = TOTAL FREQUENCY (DAYS X PUPS)/LITTERS WITH OBSERVATIONS
a. Tabulation restricted to adverse observations; all other pups appeared normal.

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TABLE C26 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - F1 GENERATION PUPS - PART B

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| LITTERS EXAMINED AND EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| TOTAL PUPS STILLBORN OR FOUND DEAD a,b | N | 5 | 3 | 7 | 3 | 5 |
| STILLBORN | N | 1 | 1 | 2 | 0 | 3 |
| FOUND DEAD | N | 4 | 2 | 5 | 3 | 2 |
| NO MILK IN STOMACH c | N(%) | 2( 50.0) | 0( 0.0) | 2( 40.0) | 2( 66.7) | 0( 0.0) |
| PUPS SACRIFICED AND NECROPSIED ON DAY 5 OR 10 POSTPARTUM | | | | | | |
| LITTERS EVALUATED | N | 16 | 16 | 16 | 16 | 16 |
| PUPS EVALUATED | N | 244 | 232 | 228 | 238 | 234 |
| APPEARED NORMAL | | | | | | |
| LITTER INCIDENCE | N(%) | 16(100.0) | 16(100.0) | 16(100.0) | 15( 93.8) | 16(100.0) |
| PUP INCIDENCE | N(%) | 244(100.0) | 232(100.0) | 228(100.0) | 237( 99.6) | 234(100.0) |
| LIVER: PALE AREAS | | | | | | |
| LITTER INCIDENCE | N(%) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 1( 6.2) | 0( 0.0) |
| PUP INCIDENCE | N(%) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 1( 0.4) | 0( 0.0) |

a. Restricted to pups in which complete necropsies were performed. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation.
b. Refer to the individual pup clinical observation table (Table C42) for external clinical observations confirmed at necropsy.
c. Analysis restricted to pups found dead and necropsied.

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TABLE C27 (PAGE 1): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16616 | | NO ADVERSE FINDINGS |
| 16617 | | NO ADVERSE FINDINGS |
| 16618 | DL( 4- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16619 | | NO ADVERSE FINDINGS |
| 16620 | | NO ADVERSE FINDINGS |
| 16621 | | NO ADVERSE FINDINGS |
| 16622 | | NO ADVERSE FINDINGS |
| 16623 | | NO ADVERSE FINDINGS |
| 16624 | | NO ADVERSE FINDINGS |
| 16625 | | NO ADVERSE FINDINGS |
| 16626 | | NO ADVERSE FINDINGS |
| 16627 | | NO ADVERSE FINDINGS |
| 16628 | | NO ADVERSE FINDINGS |
| 16629 | | NO ADVERSE FINDINGS |
| 16630 | | NO ADVERSE FINDINGS |
| 16631 | | NO ADVERSE FINDINGS |
| 16632 | | NO ADVERSE FINDINGS |
| 16633 | | NO ADVERSE FINDINGS |
| 16634 | | NO ADVERSE FINDINGS |
| 16635 | | NO ADVERSE FINDINGS |
| 16636 | | NO ADVERSE FINDINGS |
| 16637 | | NO ADVERSE FINDINGS |
| 16638 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C27 (PAGE 2): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP II | | 0.01 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16639 | DG( 13- 18) | INCISORS: MISSING/BROKEN |
| | DG( 19 ) | INCISORS: GROWN IN |
| 16640 | | NO ADVERSE FINDINGS |
| 16641 | | NO ADVERSE FINDINGS |
| 16642 | | NO ADVERSE FINDINGS |
| 16643 | DG( 19- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16644 | | NO ADVERSE FINDINGS |
| 16645 | | NO ADVERSE FINDINGS |
| 16646 | | NO ADVERSE FINDINGS |
| 16647 | | NO ADVERSE FINDINGS |
| 16648 | | NO ADVERSE FINDINGS |
| 16649 | | NO ADVERSE FINDINGS |
| 16650 | | NO ADVERSE FINDINGS |
| 16651 | | NO ADVERSE FINDINGS |
| 16652 | | NO ADVERSE FINDINGS |
| 16653 | | NO ADVERSE FINDINGS |
| 16654 | | NO ADVERSE FINDINGS |
| 16655 | | NO ADVERSE FINDINGS |
| 16656 | | NO ADVERSE FINDINGS |
| 16657 | | NO ADVERSE FINDINGS |
| 16658 | | NO ADVERSE FINDINGS |
| 16659 | | NO ADVERSE FINDINGS |
| 16660 | | NO ADVERSE FINDINGS |
| 16661 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C27 (PAGE 3): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP III | | 0.1 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16662 | | NO ADVERSE FINDINGS |
| 16663 | | NO ADVERSE FINDINGS |
| 16664 | DS( 15- 16) | INCISORS: MISSING/BROKEN |
| | DG( 0- 1) | INCISORS: MISSING/BROKEN |
| | DG( 2 ) | INCISORS: GROWN IN |
| 16665 | | NO ADVERSE FINDINGS |
| 16666 | | NO ADVERSE FINDINGS |
| 16667 | | NO ADVERSE FINDINGS |
| 16668 | | NO ADVERSE FINDINGS |
| 16669 | DL( 4- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16670 | | NO ADVERSE FINDINGS |
| 16671 | | NO ADVERSE FINDINGS |
| 16672 | | NO ADVERSE FINDINGS |
| 16673 | | NO ADVERSE FINDINGS |
| 16674 | | NO ADVERSE FINDINGS |
| 16675 | DS( 13- 16) | LOCALIZED ALOPECIA: UNDERSIDE |
| | DG( 0 ) | LOCALIZED ALOPECIA: UNDERSIDE |
| 16676 | | NO ADVERSE FINDINGS |
| 16677 | | NO ADVERSE FINDINGS |
| 16678 | | NO ADVERSE FINDINGS |
| 16679 | | NO ADVERSE FINDINGS |
| 16680 | | NO ADVERSE FINDINGS |
| 16681 | | NO ADVERSE FINDINGS |
| 16682 | | NO ADVERSE FINDINGS |
| 16683 | | NO ADVERSE FINDINGS |
| 16684 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C27 (PAGE 4): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16685 | | NO ADVERSE FINDINGS |
| 16686 | | NO ADVERSE FINDINGS |
| 16687 | | NO ADVERSE FINDINGS |
| 16688 | DS( 11- 16) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 0- 20) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16689 | | NO ADVERSE FINDINGS |
| 16690 | | NO ADVERSE FINDINGS |
| 16691 | | NO ADVERSE FINDINGS |
| 16692 | | NO ADVERSE FINDINGS |
| 16693 | | NO ADVERSE FINDINGS |
| 16694 | | NO ADVERSE FINDINGS |
| 16695 | | NO ADVERSE FINDINGS |
| 16696 | | NO ADVERSE FINDINGS |
| 16697 | | NO ADVERSE FINDINGS |
| 16698 | DL( 9- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16699 | | NO ADVERSE FINDINGS |
| 16700 | | NO ADVERSE FINDINGS |
| 16701 | | NO ADVERSE FINDINGS |
| 16702 | | NO ADVERSE FINDINGS |
| 16703 | | NO ADVERSE FINDINGS |
| 16704 | | NO ADVERSE FINDINGS |
| 16705 | | NO ADVERSE FINDINGS |
| 16706 | | NO ADVERSE FINDINGS |
| 16707 | DS( 15- 16) | CHROMODACRYORRHEA |
| | DS( 15- 16) | INCISORS: MISALIGNED |
| | DG( 0- 13) | INCISORS: MISALIGNED |
| | DG( 0- 21) | CHROMODACRYORRHEA |
| | DG( 15- 21) | INCISORS: MISALIGNED |
| | DL( 1- 10) | CHROMODACRYORRHEA a |
| | DL( 1- 10) | INCISORS: MISALIGNED a |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C27 (PAGE 5): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP V | | 30.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16708 | | NO ADVERSE FINDINGS |
| 16709 | | NO ADVERSE FINDINGS |
| 16710 | | NO ADVERSE FINDINGS |
| 16711 | | NO ADVERSE FINDINGS |
| 16712 | | NO ADVERSE FINDINGS |
| 16713 | | NO ADVERSE FINDINGS |
| 16714 | | NO ADVERSE FINDINGS |
| 16715 | | NO ADVERSE FINDINGS |
| 16716 | DG( 18- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16717 | | NO ADVERSE FINDINGS |
| 16718 | | NO ADVERSE FINDINGS |
| 16719 | | NO ADVERSE FINDINGS |
| 16720 | | NO ADVERSE FINDINGS |
| 16721 | | NO ADVERSE FINDINGS |
| 16722 | | NO ADVERSE FINDINGS |
| 16723 | DG( 14- 19) | INCISORS: MISSING/BROKEN |
| | DG( 20 ) | INCISORS: GROWN IN |
| 16724 | | NO ADVERSE FINDINGS |
| 16725 | DS( 10- 16) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 0- 5) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 7- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 10) | LOCALIZED ALOPECIA: LIMBS a |
| 16726 | | NO ADVERSE FINDINGS |
| 16727 | | NO ADVERSE FINDINGS |
| 16728 | | NO ADVERSE FINDINGS |
| 16729 | | NO ADVERSE FINDINGS |
| 16730 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C28 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| I | | | | | |
| 0 (CARRIER) | 16616 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16617 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16618 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16619 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16620 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16621 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16623 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16625 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16626 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16629 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16630 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16631 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16634 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16635 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16636 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16637 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |

DL = DAY OF LACTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C28 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| II | | | | | |
| 0.01 | 16640 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16641 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16643 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16644 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16645 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16646 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16647 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16649 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16650 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16651 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16653 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16654 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16655 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16656 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16657 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16659 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |

DL = DAY OF LACTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C28 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| III | | | | | |
| 0.1 | 16662 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16664 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16665 | DL 10 | P | 44 | ALL TISSUES APPEARED NORMAL. |
| | 16666 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16667 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16668 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16669 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16670 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16673 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16675 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16676 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16678 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16679 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16680 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16681 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16683 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |

DL = DAY OF LACTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C28 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| IV | | | | | |
| 1.0 | 16685 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16686 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16687 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16688 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16689 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16690 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16692 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16693 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16695 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16696 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16697 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16698 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16699 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16701 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16706 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16707 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |

DL = DAY OF LACTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C28 (PAGE 5): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| V | | | | | |
| 30.0 | 16708 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16709 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16711 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16712 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16713 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16715 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16716 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16717 | DL 10 | P | 48 | ALL TISSUES APPEARED NORMAL. |
| | 16718 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16719 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16722 | DL 10 | P | 45 | ALL TISSUES APPEARED NORMAL. |
| | 16723 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16724 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16725 | DL 10 | P | 47 | ALL TISSUES APPEARED NORMAL. |
| | 16728 | DL 10 | P | 46 | ALL TISSUES APPEARED NORMAL. |
| | 16730 | DL 10 | P | 52 | ALL TISSUES APPEARED NORMAL. |

DL = DAY OF LACTATION
P = PREGNANT
a. Refer to the individual clinical observation table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | | | |
| 16616 | 205. | 210. | 217. | 217. | 212. | 221. | 217. | 224. | 219. | 221. | 222. | 218. | 213. | 220. | 221. | 221. |
| 16617 | 273. | 274. | 276. | 277. | 282. | 282. | 274. | 290. | 286. | 273. | 271. | 275. | 282. | 285. | | |
| 16618 | 252. | 252. | 243. | 256. | 265. | 269. | 263. | 275. | 269. | 275. | 271. | 276. | 271. | 268. | 278. | 285. |
| 16619 | 240. | 238. | 244. | 245. | 245. | 241. | 246. | 254. | 247. | 247. | 250. | 245. | 244. | 245. | 254. | 262. |
| 16620 | 235. | 225. | 226. | 228. | 233. | 234. | 228. | 239. | 236. | 238. | 233. | 239. | 240. | 237. | | |
| 16621 | 260. | 259. | 263. | 268. | 269. | 269. | 267. | 278. | 268. | 270. | 269. | 279. | 271. | 273. | 275. | 276. |
| 16622 | 242. | 238. | 242. | 242. | 245. | 245. | 243. | 259. | 252. | 248. | 255. | 258. | 259. | 259. | 250. | 263. |
| 16623 | 247. | 239. | 250. | 250. | 252. | 248. | 257. | 267. | 259. | 258. | 263. | 270. | 270. | 267. | 276. | 281. |
| 16624 | 217. | 215. | 222. | 220. | 215. | 221. | 223. | 230. | 217. | 222. | 226. | 223. | 219. | 223. | 231. | 229. |
| 16625 | 259. | 255. | 266. | 264. | 266. | 268. | 266. | 280. | 270. | 267. | 274. | 276. | 278. | 280. | 290. | 291. |
| 16626 | 239. | 235. | 236. | 243. | 245. | 248. | 247. | 252. | 248. | 255. | 253. | 248. | 250. | 245. | 259. | 263. |
| 16627 | 247. | 239. | 249. | 250. | 245. | 242. | 247. | 257. | 249. | 244. | 248. | 252. | 249. | 247. | 250. | 268. |
| 16628 | 230. | 225. | 234. | 238. | 237. | 235. | 234. | 248. | 241. | 239. | 243. | 244. | 244. | 238. | 246. | 250. |
| 16629 | 253. | 252. | 258. | 260. | 260. | 265. | 266. | 274. | 268. | 269. | 273. | 275. | 271. | 277. | 282. | 288. |
| 16630 | 242. | 238. | 249. | 242. | 250. | 248. | 245. | 259. | 251. | 253. | 251. | 257. | 257. | 251. | 260. | 267. |
| 16631 | 241. | 250. | 255. | 255. | 250. | 260. | 257. | 269. | 255. | 260. | 273. | 269. | 260. | 270. | 273. | 276. |
| 16632 | 239. | 236. | 231. | 237. | 247. | 241. | 235. | 246. | 248. | 249. | 235. | 243. | 244. | 245. | 246. | 256. |
| 16633 | 252. | 246. | 248. | 253. | 255. | 250. | 252. | 257. | 255. | 252. | 254. | 255. | 256. | 252. | | |
| 16634 | 231. | 230. | 231. | 236. | 238. | 235. | 240. | 239. | 239. | 238. | 238. | 242. | 240. | 236. | 248. | 238. |
| 16635 | 249. | 240. | 245. | 241. | 246. | 243. | 236. | 245. | 242. | 244. | 236. | 237. | 245. | 248. | 251. | 253. |
| 16636 | 231. | 226. | 233. | 236. | 236. | 232. | 230. | 241. | 237. | 233. | 240. | 241. | 236. | 236. | 245. | 250. |
| 16637 | 246. | 248. | 256. | 252. | 251. | 260. | 254. | 261. | 252. | 256. | 259. | 260. | 257. | 261. | 266. | 269. |
| 16638 | 244. | 239. | 239. | 239. | 244. | 244. | 237. | 237. | 248. | 246. | 237. | 240. | 245. | 241. | 247. | 256. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 2): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
| 16616 | | | |
| 16617 | | | |
| 16618 | 286. | | |
| 16619 | 253. | | |
| 16620 | | | |
| 16621 | 275. | | |
| 16622 | 258. | | |
| 16623 | 283. | | |
| 16624 | | | |
| 16625 | 289. | | |
| 16626 | 258. | | |
| 16627 | 262. | | |
| 16628 | 249. | 255. | 264. |
| 16629 | | | |
| 16630 | 268. | | |
| 16631 | | | |
| 16632 | 257. | 252. | |
| 16633 | | | |
| 16634 | 249. | | |
| 16635 | | | |
| 16636 | 251. | | |
| 16637 | | | |
| 16638 | 259. | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 3): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | | 0.01 MG/KG/DAY | | | | | | | | | | |
| 16639 | 218. | 211. | 214. | 215. | 214. | 218. | 216. | 224. | 221. | 219. | 220. | 225. | 224. | 222. | | |
| 16640 | 265. | 262. | 271. | 268. | 263. | 270. | 267. | 273. | 273. | 266. | 269. | 272. | 275. | 270. | 284. | 286. |
| 16641 | 240. | 240. | 242. | 244. | 245. | 246. | 247. | 255. | 247. | 247. | 251. | 253. | 251. | 253. | 259. | 258. |
| 16642 | 250. | 247. | 256. | 257. | 258. | 257. | 262. | 266. | 264. | 266. | 271. | 261. | 263. | 264. | 280. | 287. |
| 16643 | 227. | 223. | 220. | 226. | 230. | 232. | 230. | 231. | 233. | 232. | 225. | 229. | 231. | 233. | | |
| 16644 | 261. | 266. | 270. | 275. | 270. | 283. | 274. | 282. | 278. | 282. | 286. | 285. | 286. | 291. | 290. | 295. |
| 16645 | 243. | 247. | 254. | 258. | 252. | 263. | 259. | 271. | 262. | 258. | 266. | 269. | 270. | 266. | | |
| 16646 | 241. | 243. | 245. | 244. | 242. | 249. | 246. | 251. | 248. | 250. | 251. | 245. | 245. | 249. | 247. | 252. |
| 16647 | 223. | 218. | 226. | 229. | 228. | 230. | 228. | 236. | 231. | 228. | 233. | 231. | 231. | 223. | 238. | 247. |
| 16648 | 266. | 262. | 264. | 258. | 267. | 272. | 266. | 269. | 269. | 270. | 273. | 272. | 270. | 275. | 281. | 285. |
| 16649 | 226. | 237. | 241. | 246. | 240. | 253. | 257. | 264. | 254. | 270. | 272. | 273. | 262. | 273. | 285. | 284. |
| 16650 | 250. | 246. | 248. | 250. | 252. | 258. | 255. | 259. | 256. | 260. | 258. | 248. | 257. | 263. | 264. | |
| 16651 | 229. | 230. | 230. | 229. | 236. | 239. | 230. | 234. | 238. | 240. | 239. | 230. | 239. | 242. | 243. | |
| 16652 | 258. | 251. | 259. | 265. | 260. | 261. | 260. | 267. | 260. | 262. | 265. | 273. | 274. | 268. | 282. | 289. |
| 16653 | 237. | 240. | 245. | 247. | 248. | 254. | 247. | 254. | 252. | 253. | 258. | 258. | 254. | 257. | 263. | 266. |
| 16654 | 258. | 255. | 259. | 262. | 265. | 270. | 262. | 270. | 272. | 270. | 267. | 270. | 275. | 271. | | |
| 16655 | 232. | 236. | 241. | 238. | 237. | 244. | 244. | 249. | 243. | 250. | 253. | 253. | 242. | 252. | 258. | 262. |
| 16656 | 244. | 249. | 252. | 250. | 246. | 259. | 248. | 253. | 247. | 252. | 253. | 247. | 240. | 248. | 258. | 262. |
| 16657 | 234. | 241. | 246. | 247. | 245. | 258. | 255. | 263. | 260. | 266. | 270. | 269. | 261. | 269. | 274. | 282. |
| 16658 | 248. | 243. | 252. | 251. | 250. | 249. | 249. | 260. | 253. | 251. | 255. | 260. | 261. | 251. | 264. | 268. |
| 16659 | 240. | 218. | 225. | 231. | 242. | 238. | 229. | 238. | 241. | 238. | 231. | 234. | 238. | 234. | | |
| 16660 | 256. | 249. | 258. | 264. | 260. | 259. | 260. | 272. | 262. | 264. | 268. | 274. | 272. | 266. | 275. | 284. |
| 16661 | 245. | 248. | 253. | 251. | 251. | 258. | 260. | 265. | 259. | 268. | 261. | 260. | 252. | 255. | 269. | 265. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 4): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP II | | 0.01 MG/KG/DAY |
| 16639 | | | |
| 16640 | 283. | | |
| 16641 | 259. | | |
| 16642 | 297. | | |
| 16643 | | | |
| 16644 | | | |
| 16645 | | | |
| 16646 | | | |
| 16647 | 246. | | |
| 16648 | 286. | | |
| 16649 | | | |
| 16650 | | | |
| 16651 | | | |
| 16652 | 295. | | |
| 16653 | | | |
| 16654 | | | |
| 16655 | | | |
| 16656 | | | |
| 16657 | | | |
| 16658 | 270. | | |
| 16659 | | | |
| 16660 | 281. | | |
| 16661 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 5): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | | 0.1 MG/KG/DAY | | | | | | | | | | |
| 16662 | 225. | 223. | 217. | 221. | 225. | 223. | 218. | 225. | 228. | 224. | 220. | 223. | 228. | 225. | | |
| 16663 | 268. | 267. | 279. | 279. | 284. | 284. | 285. | 295. | 291. | 290. | 300. | 307. | 309. | 300. | 316. | 316. |
| 16664 | 239. | 241. | 246. | 244. | 239. | 249. | 247. | 250. | 243. | 250. | 253. | 250. | 248. | 253. | 261. | 265. |
| 16665 | 251. | 243. | 243. | 247. | 251. | 250. | 243. | 250. | 255. | 250. | 244. | 247. | 252. | 249. | | |
| 16666 | 225. | 224. | 224. | 231. | 238. | 236. | 233. | 242. | 245. | 243. | 232. | 242. | 246. | 247. | | |
| 16667 | 266. | 260. | 262. | 263. | 273. | 272. | 261. | 272. | 270. | 268. | 262. | 269. | 276. | 273. | | |
| 16668 | 234. | 238. | 245. | 243. | 242. | 251. | 249. | 255. | 247. | 249. | 254. | 250. | 247. | 252. | 258. | 262. |
| 16669 | 246. | 242. | 247. | 244. | 253. | 257. | 247. | 250. | 250. | 254. | 251. | 243. | 253. | 257. | 264. | |
| 16670 | 225. | 226. | 230. | 228. | 224. | 235. | 230. | 236. | 227. | 233. | 233. | 237. | 238. | 238. | 242. | 246. |
| 16671 | 262. | 259. | 270. | 274. | 271. | 272. | 282. | 289. | 279. | 280. | 284. | 294. | 287. | 287. | 295. | 307. |
| 16672 | 245. | 238. | 247. | 240. | 246. | 251. | 246. | 246. | 247. | 250. | 245. | 244. | 255. | 254. | 256. | |
| 16673 | 238. | 242. | 254. | 253. | 248. | 261. | 251. | 260. | 250. | 256. | 262. | 262. | 255. | 265. | 256. | 268. |
| 16674 | 236. | 235. | 236. | 231. | 241. | 249. | 244. | 246. | 237. | 247. | 244. | 252. | 250. | 243. | 250. | 259. |
| 16675 | 249. | 252. | 257. | 254. | 252. | 260. | 256. | 265. | 258. | 262. | 266. | 265. | 262. | 265. | 267. | 266. |
| 16676 | 241. | 240. | 245. | 241. | 249. | 258. | 251. | 251. | 257. | 257. | 258. | 250. | 257. | 259. | 267. | |
| 16677 | 248. | 247. | 255. | 255. | 255. | 255. | 257. | 263. | 259. | 262. | 260. | 267. | 266. | 268. | 274. | 277. |
| 16678 | 232. | 223. | 228. | 237. | 233. | 225. | 232. | 243. | 235. | 235. | 238. | 242. | 243. | 238. | 246. | 257. |
| 16679 | 247. | 248. | 256. | 251. | 252. | 260. | 254. | 261. | 257. | 261. | 260. | 259. | 259. | 264. | 276. | 277. |
| 16680 | 231. | 225. | 234. | 234. | 235. | 232. | 236. | 242. | 240. | 238. | 237. | 236. | 234. | 233. | 239. | 247. |
| 16681 | 242. | 246. | 251. | 250. | 243. | 255. | 250. | 256. | 254. | 259. | 258. | 259. | 252. | 261. | 268. | 256. |
| 16682 | 239. | 230. | 234. | 238. | 228. | 223. | 231. | 240. | 239. | 240. | 234. | 235. | 244. | 244. | 243. | 245. |
| 16683 | 263. | 260. | 258. | 264. | 263. | 266. | 265. | 270. | 276. | 271. | 266. | 274. | 273. | 276. | | |
| 16684 | 246. | 242. | 239. | 243. | 249. | 251. | 240. | 256. | 254. | 253. | 243. | 251. | 257. | 254. | 255. | 264. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 6): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP III | | 0.1 MG/KG/DAY |
| 16662 | | | |
| 16663 | 308. | | |
| 16664 | | | |
| 16665 | | | |
| 16666 | | | |
| 16667 | | | |
| 16668 | | | |
| 16669 | | | |
| 16670 | | | |
| 16671 | 301. | | |
| 16672 | | | |
| 16673 | | | |
| 16674 | 260. | 257. | |
| 16675 | | | |
| 16676 | | | |
| 16677 | 281. | 280. | |
| 16678 | 259. | | |
| 16679 | | | |
| 16680 | 244. | | |
| 16681 | | | |
| 16682 | 233. | 257. | |
| 16683 | | | |
| 16684 | 271. | 266. | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 7): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | | 1.0 MG/KG/DAY | | | | | | | | | | |
| 16685 | 214. | 207. | 216. | 216. | 222. | 218. | 218. | 224. | 222. | 217. | 219. | 224. | 227. | 221. | 227. | 231. |
| 16686 | 267. | 270. | 277. | 277. | 271. | 279. | 276. | 280. | 276. | 281. | 282. | 281. | 284. | 290. | 290. | 294. |
| 16687 | 234. | 230. | 238. | 236. | 232. | 237. | 242. | 245. | 237. | 241. | 237. | 240. | 232. | 239. | 245. | 253. |
| 16688 | 239. | 242. | 249. | 249. | 244. | 254. | 252. | 252. | 252. | 256. | 258. | 256. | 253. | 259. | 262. | 266. |
| 16689 | 217. | 219. | 223. | 224. | 220. | 232. | 228. | 232. | 230. | 234. | 231. | 228. | 222. | 229. | 234. | 240. |
| 16690 | 255. | 258. | 268. | 271. | 266. | 275. | 271. | 280. | 270. | 276. | 279. | 278. | 278. | 284. | 291. | 298. |
| 16691 | 245. | 242. | 246. | 249. | 254. | 252. | 248. | 258. | 255. | 251. | 256. | 255. | 261. | 259. | 264. | 265. |
| 16692 | 249. | 249. | 253. | 251. | 246. | 254. | 256. | 257. | 249. | 255. | 254. | 256. | 255. | 253. | | |
| 16693 | 238. | 244. | 251. | 254. | 254. | 261. | 255. | 264. | 262. | 265. | 263. | 260. | 261. | 265. | 276. | 270. |
| 16694 | 259. | 262. | 268. | 271. | 270. | 271. | 268. | 278. | 273. | 267. | 272. | 280. | 284. | 275. | 280. | 297. |
| 16695 | 231. | 231. | 237. | 235. | 233. | 243. | 237. | 239. | 233. | 248. | 242. | 242. | 240. | 244. | 248. | 251. |
| 16696 | 245. | 238. | 238. | 249. | 252. | 258. | 248. | 256. | 255. | 262. | 266. | 267. | 260. | 265. | 268. | 274. |
| 16697 | 228. | 226. | 230. | 232. | 238. | 238. | 229. | 237. | 240. | 243. | 239. | 240. | 243. | 248. | 245. | 257. |
| 16698 | 247. | 245. | 251. | 254. | 253. | 254. | 258. | 263. | 256. | 262. | 261. | 260. | 254. | 259. | 267. | 271. |
| 16699 | 230. | 234. | 238. | 239. | 234. | 240. | 239. | 244. | 239. | 243. | 245. | 246. | 243. | 249. | 251. | 251. |
| 16700 | 242. | 248. | 255. | 258. | 257. | 257. | 264. | 271. | 273. | 271. | 273. | 276. | 277. | 275. | 273. | 288. |
| 16701 | 226. | 226. | 230. | 232. | 227. | 237. | 236. | 238. | 232. | 238. | 239. | 237. | 236. | 241. | 249. | 253. |
| 16702 | 251. | 249. | 261. | 259. | 255. | 264. | 260. | 265. | 257. | 264. | 263. | 263. | 256. | 263. | 269. | 272. |
| 16703 | 232. | 237. | 239. | 240. | 235. | 244. | 243. | 246. | 243. | 250. | 252. | 255. | 251. | 256. | 265. | 269. |
| 16704 | 251. | 253. | 259. | 262. | 257. | 268. | 263. | 272. | 266. | 274. | 278. | 279. | 272. | 280. | 290. | 292. |
| 16705 | 235. | 234. | 234. | 241. | 243. | 248. | 241. | 245. | 247. | 249. | 249. | 243. | 241. | 250. | 257. | 261. |
| 16706 | 247. | 247. | 256. | 257. | 251. | 261. | 257. | 271. | 261. | 265. | 269. | 270. | 263. | 271. | 280. | 284. |
| 16707 | 244. | 246. | 253. | 252. | 252. | 261. | 257. | 265. | 256. | 262. | 266. | 265. | 265. | 267. | 253. | 245. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 8): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
| 16685 | 230. | | |
| 16686 | | | |
| 16687 | | | |
| 16688 | | | |
| 16689 | | | |
| 16690 | | | |
| 16691 | 268. | | |
| 16692 | | | |
| 16693 | | | |
| 16694 | 291. | 304. | 305. |
| 16695 | | | |
| 16696 | | | |
| 16697 | | | |
| 16698 | | | |
| 16699 | | | |
| 16700 | 287. | | |
| 16701 | | | |
| 16702 | | | |
| 16703 | | | |
| 16704 | | | |
| 16705 | | | |
| 16706 | | | |
| 16707 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 9): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | | 30.0 MG/KG/DAY | | | | | | | | | | |
| 16708 | 213. | 216. | 222. | 220. | 218. | 225. | 222. | 224. | 221. | 224. | 222. | 222. | 220. | 229. | 234. | 236. |
| 16709 | 259. | 259. | 267. | 268. | 264. | 271. | 272. | 272. | 269. | 276. | 275. | 278. | 276. | 282. | 283. | 283. |
| 16710 | 238. | 232. | 243. | 245. | 244. | 236. | 237. | 243. | 242. | 246. | 240. | 244. | 241. | 243. | 240. | 240. |
| 16711 | 237. | 242. | 248. | 245. | 245. | 256. | 248. | 258. | 246. | 255. | 258. | 256. | 251. | 256. | 265. | 271. |
| 16712 | 231. | 234. | 234. | 231. | 237. | 245. | 239. | 238. | 241. | 239. | 240. | 235. | 244. | 253. | 251. | |
| 16713 | 258. | 262. | 268. | 270. | 265. | 274. | 269. | 278. | 267. | 273. | 279. | 276. | 271. | 277. | 285. | 283. |
| 16714 | 243. | 243. | 250. | 250. | 255. | 250. | 250. | 256. | 255. | 252. | 247. | 252. | 258. | 256. | | |
| 16715 | 241. | 241. | 242. | 247. | 251. | 252. | 250. | 256. | 253. | 258. | 250. | 254. | 258. | 256. | | |
| 16716 | 226. | 224. | 224. | 222. | 226. | 232. | 223. | 224. | 224. | 228. | 223. | 222. | 226. | 231. | 231. | |
| 16717 | 262. | 254. | 263. | 269. | 271. | 266. | 268. | 283. | 274. | 268. | 272. | 274. | 282. | 268. | 283. | 291. |
| 16718 | 235. | 235. | 244. | 243. | 235. | 245. | 242. | 249. | 240. | 248. | 243. | 243. | 241. | 245. | 257. | 261. |
| 16719 | 254. | 253. | 255. | 255. | 260. | 265. | 256. | 261. | 266. | 269. | 267. | 267. | 274. | 277. | 280. | |
| 16720 | 229. | 226. | 231. | 224. | 220. | 228. | 224. | 225. | 223. | 230. | 232. | 230. | 227. | 227. | 238. | 247. |
| 16721 | 267. | 255. | 255. | 264. | 264. | 268. | 258. | 274. | 275. | 272. | 261. | 269. | 275. | 270. | 276. | 288. |
| 16722 | 242. | 235. | 233. | 238. | 245. | 242. | 236. | 250. | 245. | 242. | 235. | 241. | 248. | 240. | | |
| 16723 | 255. | 250. | 252. | 251. | 259. | 264. | 254. | 260. | 261. | 261. | 265. | 255. | 265. | 266. | 267. | |
| 16724 | 234. | 230. | 237. | 239. | 240. | 237. | 237. | 243. | 239. | 240. | 241. | 246. | 248. | 245. | 248. | 255. |
| 16725 | 255. | 260. | 261. | 263. | 258. | 270. | 264. | 270. | 264. | 272. | 273. | 264. | 258. | 269. | 276. | 278. |
| 16726 | 238. | 241. | 243. | 237. | 243. | 251. | 244. | 245. | 248. | 254. | 250. | 242. | 251. | 255. | 258. | |
| 16727 | 249. | 247. | 253. | 252. | 252. | 254. | 257. | 256. | 256. | 260. | 257. | 262. | 261. | 264. | 266. | 276. |
| 16728 | 236. | 232. | 242. | 243. | 244. | 247. | 249. | 257. | 254. | 258. | 263. | 257. | 256. | 266. | 268. | 262. |
| 16729 | 254. | 247. | 258. | 260. | 259. | 253. | 258. | 271. | 265. | 263. | 263. | 266. | 263. | 259. | 270. | 278. |
| 16730 | 244. | 249. | 256. | 253. | 252. | 257. | 259. | 267. | 260. | 258. | 252. | 264. | 267. | 271. | 273. | 280. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C29 (PAGE 10): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | | 30.0 MG/KG/DAY | | |
| 16708 | | | | | | | | |
| 16709 | | | | | | | | |
| 16710 | 255. | 258. | 259. | 268. | 271. | 238. | 260. | 278. |
| 16711 | | | | | | | | |
| 16712 | | | | | | | | |
| 16713 | | | | | | | | |
| 16714 | | | | | | | | |
| 16715 | | | | | | | | |
| 16716 | | | | | | | | |
| 16717 | 290. | | | | | | | |
| 16718 | | | | | | | | |
| 16719 | | | | | | | | |
| 16720 | 252. | 257. | 264. | 265. | 265. | 267. | 266. | 279. |
| 16721 | 296. | 301. | 303. | 309. | 315. | 303. | 317. | 330. |
| 16722 | | | | | | | | |
| 16723 | | | | | | | | |
| 16724 | 247. | | | | | | | |
| 16725 | | | | | | | | |
| 16726 | | | | | | | | |
| 16727 | 274. | 276. | 283. | 296. | 293. | 285. | 298. | 307. |
| 16728 | | | | | | | | |
| 16729 | 279. | | | | | | | |
| 16730 | 273. | 277. | 283. | 290. | | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 1): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAY | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 P | 221. | 229. | 233. | 240. | 245. | 247. | 245. | 256. | 256. | 261. | 265. | 274. | 279. |
| 16617 P | 292. | 300. | 297. | 296. | 291. | 303. | 309. | 298. | 310. | 318. | 315. | 320. | 330. |
| 16618 P | 293. | 296. | 308. | 307. | 293. | 309. | 310. | 313. | 321. | 324. | 336. | 344. | 356. |
| 16619 P | 255. | 268. | 274. | 278. | 278. | 280. | 287. | 290. | 294. | 300. | 308. | 313. | 318. |
| 16620 P | 245. | 252. | 258. | 258. | 264. | 270. | 268. | 273. | 272. | 286. | 280. | 288. | 292. |
| 16621 P | 274. | 284. | 299. | 299. | 304. | 303. | 311. | 311. | 308. | 313. | 314. | 330. | 331. |
| 16623 P | 278. | 297. | 298. | 306. | 312. | 321. | 327. | 323. | 333. | 335. | 345. | 354. | 357. |
| 16625 P | 285. | 292. | 301. | 305. | 304. | 309. | 312. | 313. | 317. | 321. | 326. | 334. | 337. |
| 16626 P | 264. | 271. | 280. | 287. | 284. | 296. | 296. | 296. | 303. | 315. | 316. | 326. | 337. |
| 16629 P | 282. | 286. | 291. | 298. | 304. | 300. | 301. | 313. | 313. | 320. | 320. | 329. | 340. |
| 16630 P | 265. | 278. | 281. | 285. | 289. | 289. | 300. | 295. | 304. | 306. | 324. | 329. | 333. |
| 16631 P | 270. | 279. | 287. | 303. | 309. | 308. | 316. | 326. | 328. | 327. | 332. | 345. | 358. |
| 16634 P | 246. | 249. | 256. | 262. | 251. | 265. | 257. | 262. | 264. | 264. | 272. | 284. | 283. |
| 16635 P | 252. | 257. | 260. | 270. | 274. | 277. | 282. | 293. | 290. | 299. | 302. | 305. | 314. |
| 16636 P | 235. | 252. | 256. | 261. | 261. | 268. | 277. | 274. | 279. | 278. | 280. | 302. | 300. |
| 16637 P | 255. | 272. | 274. | 282. | 286. | 281. | 282. | 296. | 291. | 299. | 309. | 307. | 318. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 2): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 P | 283. | 283. | 290. | 300. | 309. | 320. | 336. | 347. | 360. | | | | |
| 16617 P | 334. | 342. | 355. | 368. | 397. | 413. | 433. | 444. | 448. | | | | |
| 16618 P | 357. | 368. | 369. | 378. | 405. | 421. | 438. | 456. | | | | | |
| 16619 P | 325. | 338. | 340. | 349. | 364. | 373. | 387. | 403. | 422. | | | | |
| 16620 P | 296. | 298. | 306. | 315. | 327. | 340. | 350. | 370. | 371. | | | | |
| 16621 P | 333. | 329. | 332. | 339. | 356. | 365. | 376. | 389. | | | | | |
| 16623 P | 361. | 365. | 370. | 385. | 400. | 403. | 429. | 434. | 458. | | | | |
| 16625 P | 344. | 350. | 352. | 362. | 378. | 390. | 404. | 423. | | | | | |
| 16626 P | 341. | 340. | 350. | 355. | 370. | 386. | 396. | 412. | 424. | | | | |
| 16629 P | 345. | 346. | 355. | 368. | 377. | 396. | 397. | 414. | 430. | | | | |
| 16630 P | 320. | 336. | 343. | 340. | 352. | 368. | 387. | 398. | | | | | |
| 16631 P | 366. | 367. | 380. | 378. | 394. | 419. | 426. | 439. | 449. | | | | |
| 16634 P | 288. | 287. | 298. | 311. | 324. | 332. | 337. | 361. | 370. | | | | |
| 16635 P | 323. | 317. | 326. | 327. | 340. | 356. | 362. | 372. | 380. | | | | |
| 16636 P | 302. | 305. | 307. | 318. | 331. | 350. | 363. | 376. | | | | | |
| 16637 P | 311. | 329. | 337. | 343. | 362. | 380. | 391. | 401. | 411. | | | | |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 3): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16640 P | 279. | 288. | 295. | 293. | 293. | 300. | 303. | 303. | 306. | 311. | 313. | 318. | 331. |
| 16641 P | 258. | 267. | 272. | 271. | 275. | 276. | 273. | 282. | 281. | 285. | 291. | 300. | 293. |
| 16643 P | 242. | 246. | 253. | 257. | 263. | 264. | 267. | 270. | 273. | 280. | 282. | 284. | 289. |
| 16644 P | 295. | 296. | 306. | 316. | 322. | 317. | 318. | 329. | 328. | 327. | 335. | 349. | 354. |
| 16645 P | 271. | 284. | 285. | 286. | 292. | 300. | 292. | 301. | 306. | 315. | 326. | 326. | 329. |
| 16646 P | 257. | 260. | 270. | 276. | 278. | 278. | 281. | 286. | 285. | 291. | 293. | 307. | 309. |
| 16647 P | 245. | 249. | 261. | 259. | 268. | 274. | 280. | 277. | 280. | 286. | 293. | 299. | 304. |
| 16649 P | 280. | 295. | 301. | 310. | 313. | 320. | 325. | 325. | 335. | 337. | 341. | 356. | 367. |
| 16650 P | 263. | 279. | 283. | 288. | 295. | 289. | 291. | 290. | 306. | 302. | 307. | 309. | 316. |
| 16651 P | 253. | 251. | 257. | 262. | 274. | 276. | 276. | 272. | 282. | 279. | 285. | 290. | 290. |
| 16653 P | 257. | 258. | 273. | 285. | 287. | 280. | 286. | 300. | 297. | 303. | 312. | 318. | 328. |
| 16654 P | 283. | 285. | 293. | 290. | 298. | 304. | 311. | 310. | 314. | 320. | 324. | 329. | 333. |
| 16655 P | 258. | 258. | 269. | 277. | 273. | 283. | 288. | 294. | 296. | 298. | 302. | 316. | 318. |
| 16656 P | 258. | 265. | 269. | 279. | 282. | 286. | 286. | 293. | 291. | 300. | 301. | 308. | 318. |
| 16657 P | 274. | 285. | 298. | 303. | 306. | 307. | 316. | 328. | 328. | 333. | 342. | 352. | 355. |
| 16659 P | 238. | 245. | 253. | 256. | 259. | 268. | 270. | 272. | 274. | 285. | 287. | 289. | 296. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 4): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16640 P | 328. | 336. | 337. | 347. | 361. | 376. | 382. | 406. | 413. | | | | |
| 16641 P | 298. | 304. | 308. | 315. | 327. | 348. | 358. | 368. | 392. | | | | |
| 16643 P | 300. | 304. | 307. | 317. | 322. | 342. | 348. | 367. | 383. | | | | |
| 16644 P | 359. | 356. | 368. | 371. | 386. | 411. | 426. | 440. | | | | | |
| 16645 P | 340. | 346. | 361. | 362. | 376. | 388. | 398. | 415. | 423. | | | | |
| 16646 P | 309. | 318. | 323. | 335. | 345. | 363. | 368. | 384. | 400. | | | | |
| 16647 P | 306. | 306. | 311. | 322. | 340. | 349. | 368. | 375. | | | | | |
| 16649 P | 367. | 372. | 383. | 396. | 408. | 421. | 436. | 454. | 469. | | | | |
| 16650 P | 325. | 328. | 334. | 340. | 357. | 369. | 386. | 389. | 403. | | | | |
| 16651 P | 296. | 302. | 306. | 321. | 331. | 345. | 363. | 372. | 388. | | | | |
| 16653 P | 336. | 334. | 345. | 349. | 355. | 369. | 351. | 393. | 406. | | | | |
| 16654 P | 344. | 351. | 361. | 369. | 377. | 397. | 402. | 432. | 446. | | | | |
| 16655 P | 323. | 318. | 327. | 336. | 344. | 362. | 365. | 369. | 394. | | | | |
| 16656 P | 325. | 320. | 327. | 332. | 338. | 355. | 370. | 388. | 400. | | | | |
| 16657 P | 368. | 366. | 372. | 385. | 398. | 415. | 425. | 432. | | | | | |
| 16659 P | 301. | 312. | 322. | 326. | 334. | 348. | 360. | 380. | 390. | | | | |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 5): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 P | 228. | 236. | 239. | 242. | 248. | 257. | 256. | 261. | 267. | 271. | 272. | 277. | 282. |
| 16664 P | 258. | 268. | 273. | 278. | 285. | 288. | 288. | 294. | 296. | 304. | 310. | 319. | 323. |
| 16665 P | 261. | 268. | 276. | 270. | 275. | 286. | 286. | 288. | 292. | 301. | 303. | 311. | 314. |
| 16666 P | 250. | 255. | 267. | 266. | 277. | 281. | 283. | 287. | 286. | 297. | 298. | 306. | 310. |
| 16667 P | 282. | 290. | 289. | 293. | 296. | 310. | 316. | 316. | 311. | 327. | 326. | 328. | 335. |
| 16668 P | 258. | 267. | 273. | 283. | 283. | 286. | 288. | 295. | 299. | 304. | 307. | 317. | 326. |
| 16669 P | 274. | 274. | 278. | 283. | 290. | 286. | 293. | 288. | 305. | 302. | 307. | 314. | 314. |
| 16670 P | 247. | 249. | 254. | 257. | 262. | 266. | 266. | 284. | 276. | 281. | 286. | 297. | 299. |
| 16673 P | 263. | 271. | 276. | 287. | 292. | 292. | 295. | 306. | 305. | 302. | 310. | 312. | 322. |
| 16675 P | 255. | 266. | 272. | 274. | 286. | 283. | 289. | 295. | 299. | 301. | 304. | 313. | 313. |
| 16676 P | 269. | 276. | 284. | 288. | 295. | 304. | 300. | 302. | 316. | 318. | 318. | 328. | 328. |
| 16678 P | 257. | 269. | 270. | 280. | 290. | 286. | 290. | 304. | 298. | 302. | 310. | 312. | 317. |
| 16679 P | 282. | 278. | 286. | 301. | 307. | 307. | 308. | 319. | 322. | 327. | 325. | 333. | 344. |
| 16680 P | 247. | 260. | 268. | 272. | 271. | 269. | 278. | 286. | 286. | 289. | 296. | 297. | 310. |
| 16681 P | 257. | 273. | 286. | 282. | 292. | 289. | 288. | 297. | 304. | 295. | 304. | 305. | 316. |
| 16683 P | 276. | 291. | 290. | 292. | 300. | 310. | 310. | 313. | 312. | 326. | 325. | 329. | 338. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 6): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 P | 289. | 289. | 300. | 307. | 318. | 329. | 338. | 356. | 363. | | | | |
| 16664 P | 332. | 329. | 342. | 352. | 362. | 381. | 390. | 402. | 420. | | | | |
| 16665 P | 318. | 320. | 333. | 339. | 354. | 366. | 378. | 394. | 403. | | | | |
| 16666 P | 313. | 320. | 328. | 336. | 353. | 371. | 378. | 396. | 410. | | | | |
| 16667 P | 338. | 344. | 350. | 355. | 373. | 383. | 392. | 412. | 417. | | | | |
| 16668 P | 328. | 324. | 335. | 342. | 353. | 364. | 378. | 387. | 405. | | | | |
| 16669 P | 324. | 330. | 328. | 342. | 357. | 369. | 390. | 408. | 421. | | | | |
| 16670 P | 305. | 303. | 308. | 323. | 326. | 341. | 354. | 367. | 379. | | | | |
| 16673 P | 325. | 326. | 335. | 347. | 351. | 361. | 374. | 385. | | | | | |
| 16675 P | 316. | 318. | 316. | 328. | 343. | 362. | 375. | 379. | 390. | | | | |
| 16676 P | 335. | 341. | 355. | 368. | 379. | 395. | 417. | 431. | 453. | | | | |
| 16678 P | 322. | 328. | 341. | 346. | 363. | 378. | 392. | 409. | | | | | |
| 16679 P | 350. | 350. | 353. | 361. | 377. | 394. | 402. | 419. | 440. | | | | |
| 16680 P | 307. | 313. | 317. | 325. | 341. | 358. | 376. | 391. | | | | | |
| 16681 P | 313. | 317. | 325. | 337. | 353. | 366. | 391. | 393. | 410. | | | | |
| 16683 P | 352. | 356. | 370. | 380. | 389. | 408. | 425. | 449. | 447. | | | | |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 7): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 P | 225. | 240. | 241. | 246. | 253. | 256. | 257. | 261. | 262. | 267. | 272. | 284. | 285. |
| 16686 P | 296. | 304. | 305. | 317. | 321. | 325. | 324. | 327. | 333. | 338. | 344. | 351. | 360. |
| 16687 P | 246. | 255. | 261. | 270. | 281. | 276. | 280. | 293. | 292. | 294. | 301. | 312. | 324. |
| 16688 P | 260. | 268. | 278. | 283. | 288. | 290. | 286. | 295. | 297. | 305. | 309. | 318. | 323. |
| 16689 P | 239. | 234. | 242. | 256. | 261. | 263. | 270. | 281. | 281. | 284. | 292. | 302. | 304. |
| 16690 P | 294. | 301. | 308. | 314. | 321. | 316. | 314. | 327. | 328. | 334. | 337. | 340. | 350. |
| 16692 P | 252. | 265. | 271. | 276. | 285. | 286. | 293. | 297. | 301. | 305. | 310. | 321. | 324. |
| 16693 P | 276. | 283. | 287. | 290. | 270. | 268. | 287. | 286. | 295. | 298. | 307. | 310. | 319. |
| 16695 P | 248. | 264. | 261. | 272. | 272. | 280. | 268. | 285. | 286. | 284. | 292. | 301. | 302. |
| 16696 P | 270. | 280. | 289. | 300. | 298. | 301. | 304. | 319. | 316. | 321. | 328. | 332. | 343. |
| 16697 P | 259. | 258. | 269. | 270. | 268. | 268. | 268. | 281. | 280. | 282. | 283. | 300. | 299. |
| 16698 P | 274. | 277. | 288. | 290. | 292. | 295. | 295. | 308. | 309. | 312. | 313. | 319. | 323. |
| 16699 P | 235. | 252. | 263. | 269. | 273. | 276. | 280. | 292. | 289. | 296. | 297. | 299. | 312. |
| 16701 P | 252. | 254. | 262. | 274. | 278. | 275. | 274. | 286. | 287. | 293. | 298. | 308. | 314. |
| 16706 P | 283. | 280. | 292. | 294. | 299. | 302. | 303. | 307. | 309. | 315. | 317. | 325. | 330. |
| 16707 P | 235. | 255. | 267. | 272. | 272. | 275. | 271. | 285. | 282. | 287. | 290. | 301. | 304. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 8): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 P | 288. | 282. | 294. | 299. | 313. | 332. | 339. | 358. | 346. | | | | |
| 16686 P | 369. | 373. | 375. | 391. | 408. | 429. | 442. | 454. | 475. | | | | |
| 16687 P | 326. | 329. | 335. | 338. | 351. | 362. | 376. | 392. | 402. | | | | |
| 16688 P | 329. | 332. | 346. | 359. | 372. | 399. | 409. | 425. | | | | | |
| 16689 P | 305. | 312. | 327. | 333. | 342. | 363. | 370. | 388. | 401. | | | | |
| 16690 P | 360. | 360. | 377. | 382. | 396. | 418. | 432. | 446. | 461. | | | | |
| 16692 P | 330. | 338. | 345. | 350. | 362. | 375. | 387. | 404. | 410. | | | | |
| 16693 P | 323. | 326. | 320. | 338. | 351. | 361. | 387. | 394. | 407. | | | | |
| 16695 P | 299. | 296. | 307. | 324. | 334. | 350. | 365. | 388. | 397. | | | | |
| 16696 P | 352. | 354. | 364. | 371. | 386. | 404. | 419. | 424. | 438. | | | | |
| 16697 P | 306. | 306. | 316. | 328. | 335. | 344. | 361. | 369. | 387. | | | | |
| 16698 P | 330. | 329. | 336. | 351. | 360. | 381. | 392. | 399. | 419. | | | | |
| 16699 P | 317. | 319. | 326. | 338. | 349. | 363. | 377. | 389. | 405. | | | | |
| 16701 P | 320. | 322. | 328. | 332. | 351. | 364. | 373. | 390. | 400. | | | | |
| 16706 P | 338. | 346. | 351. | 368. | 377. | 398. | 407. | 422. | 441. | | | | |
| 16707 P | 305. | 312. | 318. | 329. | 340. | 356. | 368. | 375. | 388. | | | | |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 9): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 P | 230. | 230. | 235. | 243. | 246. | 248. | 245. | 249. | 255. | 257. | 261. | 270. | 276. |
| 16709 P | 278. | 290. | 294. | 307. | 306. | 308. | 307. | 318. | 316. | 321. | 328. | 332. | 346. |
| 16711 P | 268. | 277. | 282. | 297. | 295. | 303. | 303. | 316. | 319. | 321. | 323. | 333. | 341. |
| 16712 P | 259. | 260. | 267. | 270. | 278. | 280. | 287. | 288. | 301. | 302. | 302. | 312. | 320. |
| 16713 P | 279. | 290. | 297. | 305. | 311. | 312. | 311. | 321. | 323. | 322. | 321. | 330. | 336. |
| 16715 P | 261. | 267. | 271. | 278. | 282. | 283. | 286. | 293. | 294. | 299. | 305. | 305. | 316. |
| 16716 P | 232. | 236. | 238. | 242. | 244. | 246. | 252. | 252. | 266. | 265. | 269. | 275. | 277. |
| 16717 P | 291. | 303. | 308. | 312. | 316. | 314. | 330. | 332. | 332. | 332. | 342. | 351. | 358. |
| 16718 P | 256. | 263. | 272. | 281. | 284. | 286. | 285. | 300. | 293. | 302. | 307. | 317. | 316. |
| 16719 P | 287. | 286. | 290. | 296. | 305. | 307. | 309. | 310. | 320. | 324. | 323. | 331. | 337. |
| 16722 P | 248. | 252. | 260. | 265. | 271. | 277. | 276. | 283. | 283. | 295. | 293. | 298. | 303. |
| 16723 P | 274. | 278. | 281. | 285. | 297. | 301. | 297. | 300. | 311. | 308. | 316. | 319. | 323. |
| 16724 P | 245. | 256. | 266. | 269. | 270. | 269. | 280. | 280. | 281. | 285. | 292. | 300. | 302. |
| 16725 P | 278. | 283. | 292. | 300. | 300. | 302. | 303. | 316. | 319. | 315. | 319. | 332. | 344. |
| 16728 P | 265. | 275. | 277. | 278. | 289. | 286. | 292. | 304. | 300. | 305. | 314. | 315. | 328. |
| 16730 P | 288. | 289. | 297. | 315. | 312. | 315. | 320. | 322. | 334. | 335. | 340. | 348. | 347. |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C30 (PAGE 10): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 P | 283. | 283. | 288. | 298. | 308. | 327. | 335. | 346. | 359. | | | | |
| 16709 P | 348. | 352. | 359. | 362. | 375. | 392. | 410. | 421. | 431. | | | | |
| 16711 P | 345. | 344. | 357. | 365. | 383. | 400. | 412. | 430. | | | | | |
| 16712 P | 326. | 328. | 334. | 351. | 360. | 368. | 376. | 391. | 412. | | | | |
| 16713 P | 340. | 341. | 354. | 355. | 369. | 388. | 396. | 402. | | | | | |
| 16715 P | 318. | 327. | 329. | 341. | 354. | 364. | 381. | 401. | 415. | | | | |
| 16716 P | 288. | 288. | 298. | 308. | 321. | 330. | 354. | 364. | 365. | | | | |
| 16717 P | 360. | 360. | 372. | 381. | 398. | 412. | 426. | 447. | 466. | | | | |
| 16718 P | 313. | 320. | 321. | 338. | 351. | 367. | 386. | 398. | | | | | |
| 16719 P | 342. | 344. | 354. | 361. | 371. | 380. | 398. | 410. | 421. | | | | |
| 16722 P | 304. | 310. | 317. | 327. | 343. | 359. | 378. | 396. | 409. | | | | |
| 16723 P | 329. | 340. | 338. | 354. | 362. | 372. | 390. | 398. | 401. | | | | |
| 16724 P | 304. | 307. | 315. | 322. | 336. | 347. | 364. | 375. | | | | | |
| 16725 P | 345. | 351. | 361. | 372. | 382. | 402. | 414. | 429. | 448. | | | | |
| 16728 P | 329. | 330. | 336. | 350. | 358. | 380. | 396. | 402. | | | | | |
| 16730 P | 347. | 361. | 364. | 371. | 378. | 393. | 409. | 435. | 451. | 460. | | | |

P = PREGNANT
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C31 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | |
| 16616 | 265. | 258. | 266. | 275. | 269. | 276. | 289. | 302. | 305. | 327. |
| 16617 | 323. | 314. | 318. | 318. | 329. | 338. | 321. | 323. | 337. | 343. |
| 16618 | 318. | 336. | 338. | 338. | 353. | 365. | 362. | 362. | 368. | 397. |
| 16619 | 307. | 316. | 318. | 323. | 319. | 326. | 324. | 324. | 324. | 342. |
| 16620 | 276. | 277. | 270. | 270. | 290. | 294. | 292. | 300. | 318. | 326. |
| 16621 | 310. | 314. | 319. | 321. | 302. | 302. | 310. | 308. | 316. | 314. |
| 16623 | 327. | 331. | 343. | 337. | 334. | 348. | 349. | 342. | 356. | 362. |
| 16625 | 309. | 318. | 322. | 315. | 326. | 337. | 329. | 330. | 329. | 345. |
| 16626 | 314. | 321. | 311. | 316. | 317. | 329. | 329. | 335. | 337. | 365. |
| 16629 | 304. | 308. | 310. | 312. | 316. | 317. | 315. | 322. | 322. | 339. |
| 16630 | 309. | 321. | 325. | 325. | 310. | 332. | 338. | 343. | 342. | 353. |
| 16631 | 314. | 319. | 320. | 317. | 306. | 325. | 330. | 327. | 333. | 356. |
| 16634 | 275. | 284. | 288. | 285. | 292. | 293. | 288. | 301. | 310. | 324. |
| 16635 | 283. | 293. | 301. | 304. | 299. | 303. | 319. | 316. | 322. | 350. |
| 16636 | 292. | 292. | 294. | 300. | 300. | 311. | 319. | 321. | 327. | 336. |
| 16637 | 309. | 300. | 298. | 300. | 287. | 296. | 306. | 315. | 314. | 319. |

DAY = DAY OF LACTATION
ALL WEIGHTS ARE RECORDED IN GRAMS.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C31 (PAGE 2): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | |
| 16640 | 314. | 317. | 318. | 313. | 318. | 340. | 335. | 338. | 335. | 365. |
| 16641 | 279. | 280. | 279. | 286. | 276. | 284. | 287. | 283. | 288. | 309. |
| 16643 | 284. | 288. | 282. | 287. | 304. | 303. | 312. | 304. | 312. | 315. |
| 16644 | 345. | 331. | 329. | 354. | 358. | 328. | 343. | 347. | 355. | 366. |
| 16645 | 318. | 329. | 320. | 320. | 328. | 337. | 336. | 347. | 348. | 351. |
| 16646 | 299. | 294. | 303. | 304. | 294. | 305. | 308. | 298. | 315. | 324. |
| 16647 | 300. | 289. | 300. | 300. | 294. | 302. | 313. | 314. | 309. | 330. |
| 16649 | 345. | 345. | 358. | 363. | 352. | 355. | 365. | 361. | 368. | 375. |
| 16650 | 290. | 290. | 291. | 304. | 305. | 300. | 307. | 306. | 312. | 329. |
| 16651 | 285. | 278. | 277. | 280. | 280. | 274. | 284. | 301. | 294. | 312. |
| 16653 | 307. | 304. | 316. | 323. | 327. | 333. | 340. | 328. | 345. | 362. |
| 16654 | 316. | 315. | 317. | 326. | 322. | 333. | 322. | 326. | 345. | 345. |
| 16655 | 283. | 292. | 297. | 306. | 303. | 300. | 310. | 314. | 318. | 340. |
| 16656 | 296. | 298. | 308. | 311. | 308. | 310. | 315. | 319. | 321. | 338. |
| 16657 | 329. | 328. | 328. | 330. | 331. | 338. | 338. | 348. | 348. | 363. |
| 16659 | 290. | 282. | 280. | 280. | 299. | 298. | 285. | 293. | 304. | 313. |

DAY = DAY OF LACTATION
ALL WEIGHTS ARE RECORDED IN GRAMS.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C31 (PAGE 3): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | |
| 16662 | 265. | 264. | 263. | 263. | 267. | 268. | 263. | 270. | 272. | 280. |
| 16664 | 328. | 306. | 308. | 311. | 298. | 303. | 319. | 317. | 319. | 331. |
| 16665 | 306. | 287. | 292. | 291. | 285. | 291. | 306. | 297. | 308. | 314. |
| 16666 | 293. | 292. | 296. | 289. | 305. | 324. | 312. | 306. | 315. | 310. |
| 16667 | 314. | 310. | 303. | 302. | 311. | 311. | 300. | 305. | 319. | 323. |
| 16668 | 302. | 296. | 305. | 306. | 291. | 305. | 322. | 318. | 316. | 339. |
| 16669 | 310. | 310. | 310. | 326. | 334. | 331. | 330. | 335. | 333. | 357. |
| 16670 | 290. | 288. | 298. | 305. | 294. | 290. | 298. | 300. | 312. | 312. |
| 16673 | 300. | 286. | 288. | 298. | 298. | 301. | 308. | 315. | 320. | 340. |
| 16675 | 282. | 284. | 280. | 294. | 291. | 303. | 299. | 304. | 317. | 346. |
| 16676 | 316. | 316. | 314. | 330. | 337. | 347. | 344. | 356. | 352. | 369. |
| 16678 | 331. | 306. | 318. | 324. | 308. | 321. | 324. | 324. | 330. | 332. |
| 16679 | 318. | 313. | 321. | 320. | 314. | 318. | 323. | 327. | 325. | 341. |
| 16680 | 303. | 280. | 280. | 288. | 280. | 294. | 294. | 296. | 310. | 331. |
| 16681 | 289. | 298. | 312. | 313. | 298. | 300. | 310. | 311. | 314. | 333. |
| 16683 | 327. | 323. | 303. | 315. | 313. | 318. | 314. | 320. | 337. | 336. |

DAY = DAY OF LACTATION
ALL WEIGHTS ARE RECORDED IN GRAMS.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C31 (PAGE 4): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | |
| 16685 | 265. | 267. | 271. | 277. | 269. | 276. | 275. | 292. | 293. | 300. |
| 16686 | 323. | 320. | 336. | 342. | 336. | 351. | 358. | 355. | 360. | 391. |
| 16687 | 310. | 303. | 305. | 306. | 307. | 310. | 312. | 316. | 323. | 336. |
| 16688 | 315. | 316. | 306. | 310. | 318. | 321. | 324. | 316. | 337. | 329. |
| 16689 | 282. | 280. | 295. | 298. | 293. | 304. | 303. | 311. | 313. | 279. |
| 16690 | 328. | 321. | 330. | 329. | 319. | 324. | 334. | 319. | 338. | 360. |
| 16692 | 331. | 320. | 320. | 316. | 320. | 323. | 310. | 320. | 335. | 335. |
| 16693 | 316. | 317. | 327. | 331. | 331. | 341. | 343. | 345. | 342. | 353. |
| 16695 | 284. | 289. | 297. | 302. | 292. | 262. | 295. | 306. | 312. | 315. |
| 16696 | 326. | 323. | 328. | 328. | 322. | 329. | 330. | 331. | 334. | 348. |
| 16697 | 283. | 277. | 278. | 286. | 288. | 285. | 291. | 287. | 287. | 312. |
| 16698 | 299. | 298. | 312. | 318. | 314. | 327. | 326. | 319. | 325. | 329. |
| 16699 | 262. | 274. | 278. | 280. | 277. | 289. | 294. | 289. | 297. | 313. |
| 16701 | 285. | 286. | 298. | 304. | 303. | 315. | 314. | 318. | 320. | 317. |
| 16706 | 324. | 322. | 324. | 322. | 328. | 336. | 341. | 338. | 348. | 361. |
| 16707 | 291. | 301. | 306. | 303. | 301. | 300. | 317. | 313. | 307. | 314. |

DAY = DAY OF LACTATION
ALL WEIGHTS ARE RECORDED IN GRAMS.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C31 (PAGE 5): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | |
| 16708 | 264. | 262. | 268. | 265. | 261. | 262. | 275. | 280. | 281. | 295. |
| 16709 | 307. | 311. | 321. | 324. | 318. | 325. | 324. | 324. | 321. | 348. |
| 16711 | 336. | 327. | 323. | 331. | 333. | 328. | 334. | 340. | 350. | 363. |
| 16712 | 311. | 311. | 310. | 320. | 323. | 312. | 320. | 326. | 336. | 359. |
| 16713 | 332. | 316. | 311. | 317. | 314. | 310. | 317. | 327. | 325. | 348. |
| 16715 | 300. | 297. | 300. | 306. | 316. | 312. | 315. | 312. | 312. | 325. |
| 16716 | 256. | 265. | 269. | 288. | 285. | 273. | 285. | 286. | 293. | 323. |
| 16717 | 331. | 326. | 333. | 337. | 334. | 341. | 340. | 342. | 353. | 367. |
| 16718 | 298. | 287. | 289. | 290. | 290. | 304. | 304. | 306. | 306. | 321. |
| 16719 | 310. | 304. | 302. | 298. | 293. | 300. | 297. | 304. | 310. | 328. |
| 16722 | 294. | 297. | 305. | 301. | 308. | 316. | 316. | 325. | 329. | 337. |
| 16723 | 304. | 309. | 309. | 324. | 325. | 318. | 326. | 341. | 342. | 356. |
| 16724 | 296. | 292. | 292. | 297. | 296. | 302. | 298. | 305. | 312. | 317. |
| 16725 | 322. | 320. | 321. | 325. | 331. | 341. | 334. | 337. | 341. | 371. |
| 16728 | 312. | 302. | 305. | 318. | 312. | 308. | 314. | 328. | 326. | 333. |
| 16730 | 331. | 341. | 347. | 342. | 342. | 350. | 338. | 340. | 354. | 352. |

DAY = DAY OF LACTATION
ALL WEIGHTS ARE RECORDED IN GRAMS.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C32 (PAGE 1): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 | 25. | 25. | 25. | 25. | 24. | 24. | 24. | 23. | 19. | 27. | 22. | 17. | 23. |
| 16617 | 29. | 25. | 33. | 34. | 28. | 26. | 34. | 41. | 27. | 30. | 33. | 38. | 38. |
| 16618 | 27. | 21. | 26. | 33. | 30. | 32. | 34. | 26. | 33. | 32. | 35. | 28. | 21. |
| 16619 | 28. | 32. | 34. | 27. | 25. | 36. | 30. | 29. | 18. | 27. | 25. | 24. | 22. |
| 16620 | 7. | 22. | 20. | 25. | 24. | 35. | 27. | 26. | 21. | 24. | 24. | 27. | 23. |
| 16621 | 27. | 25. | 36. | 34. | 30. | 48. | 39. | 37. | 34. | 33. | 39. | 34. | 25. |
| 16622 | 32. | 30. | 43. | 35. | 35. | 41. | 41. | 36. | 35. | 42. | 42. | 36. | 32. |
| 16623 | 23. | 35. | 29. | 28. | 26. | 37. | 35. | 36. | 20. | 44. | 42. | 37. | 27. |
| 16624 | 17. | 23. | 22. | 13. | 23. | 25. | 26. | 14. | 20. | 24. | 21. | 15. | 24. |
| 16625 | 23. | 42. | 36. | 37. | 36. | 36. | 46. | 35. | 27. | 39. | 36. | 37. | 29. |
| 16626 | 17. | 25. | 23. | 22. | 23. | 27. | 24. | 23. | 23. | 27. | 28. | 31. | 22. |
| 16627 | 14. | 27. | 25. | 24. | 14. | 26. | 27. | 27. | 15. | 26. | 34. | 27. | 17. |
| 16628 | 17. | 25. | 26. | 26. | 25. | 29. | 29. | 24. | 18. | 30. | 29. | 25. | 20. |
| 16629 | 22. | 28. | 28. | 28. | 24. | 38. | 26. | 25. | 19. | 27. | 31. | 28. | 27. |
| 16630 | 45. | b | b | b | 46. | b | b | 39. | b | b | b | b | b |
| 16631 | 28. | 30. | 27. | 22. | 29. | 31. | 31. | 19. | 29. | 32. | 27. | 18. | 26. |
| 16632 | 25. | 20. | 28. | 35. | 25. | 20. | 29. | 31. | 22. | 17. | 30. | 29. | 24. |
| 16633 | 16. | 20. | 34. | 30. | 18. | 26. | 25. | 24. | 13. | 27. | 43. | 24. | 16. |
| 16634 | 27. | 30. | 35. | 30. | 27. | 34. | 38. | b | 41. | 39. | b | b | b |
| 16635 | 12. | 26. | 22. | 29. | 26. | 21. | 28. | 25. | 37. | 21. | 24. | 31. | 36. |
| 16636 | 24. | 28. | 37. | 32. | 29. | 30. | 33. | 33. | 33. | 32. | 30. | 37. | 30. |
| 16637 | 30. | 34. | 31. | 26. | 33. | 36. | 42. | 25. | 32. | 34. | 34. | 27. | 32. |
| 16638 | 48. | 38. | b | b | b | b | b | 46. | b | 24. | b | 51. | b |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C32 (PAGE 2): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16639 | 19. | 23. | 20. | 26. | 30. | 26. | 30. | 23. | 19. | 23. | 32. | 27. | 18. |
| 16640 | 15. | 35. | 31. | 29. | 29. | 39. | 44. | 38. | 30. | 42. | 42. | 41. | 35. |
| 16641 | 18. | 27. | 26. | 25. | 21. | 29. | 28. | 28. | 18. | 28. | 29. | 35. | 23. |
| 16642 | 23. | 33. | 33. | 28. | 28. | 36. | 30. | 35. | 28. | 53. | 39. | b | 56. |
| 16643 | b | b | b | b | b | b | 30. | 39. | 25. | 24. | 30. | 36. | 30. |
| 16644 | 28. | 31. | 30. | 22. | 30. | 36. | 29. | 26. | 27. | 31. | 29. | 25. | 32. |
| 16645 | 30. | 38. | 37. | 30. | 41. | 45. | 48. | 29. | 24. | 43. | 44. | 44. | 35. |
| 16646 | 27. | 29. | 32. | 23. | 36. | 41. | 34. | 31. | 37. | 34. | 35. | 31. | 29. |
| 16647 | b | 36. | 33. | 34. | 24. | 32. | 33. | 27. | 21. | 26. | 37. | 32. | 16. |
| 16648 | 31. | 32. | 29. | 32. | 36. | 36. | 36. | 30. | 30. | 34. | 36. | 36. | 29. |
| 16649 | 30. | 33. | 34. | 17. | 33. | 39. | 31. | 25. | 30. | 41. | 32. | 20. | 38. |
| 16650 | 34. | 31. | 31. | 29. | 30. | 34. | 28. | 25. | 24. | 30. | 22. | 32. | 36. |
| 16651 | 35. | b | b | b | b | b | 42. | b | b | 43. | 23. | b | b |
| 16652 | 20. | 31. | 30. | 32. | 23. | 34. | 30. | 25. | 25. | 30. | 34. | 33. | 27. |
| 16653 | 40. | 33. | 30. | 30. | 44. | 49. | 33. | 51. | 37. | 39. | 42. | 49. | 37. |
| 16654 | 31. | 33. | 38. | 41. | 37. | 32. | 36. | 41. | 32. | 34. | 43. | 41. | 42. |
| 16655 | 25. | 32. | 30. | 20. | 29. | 36. | 30. | 23. | 25. | 32. | 29. | 21. | 29. |
| 16656 | 30. | 43. | 32. | 24. | 33. | 40. | 36. | 24. | 33. | 31. | 25. | 18. | 33. |
| 16657 | 28. | 28. | 30. | 28. | 33. | 38. | 33. | 28. | 28. | 39. | 36. | 26. | 41. |
| 16658 | 21. | 4. | 28. | 28. | 22. | 34. | 34. | 33. | 17. | 38. | 39. | 33. | 21. |
| 16659 | 22. | 31. | 30. | 30. | 25. | 27. | 33. | 32. | 31. | 16. | 27. | 25. | 24. |
| 16660 | 8. | 32. | 34. | 22. | 27. | 34. | 32. | 30. | 17. | 43. | 37. | 31. | 23. |
| 16661 | 32. | 37. | 32. | 32. | 56. | 50. | 47. | 41. | 27. | 27. | 45. | 39. | 33. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C32 (PAGE 3): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 | 24. | 18. | 22. | 31. | 24. | 20. | 27. | 31. | 10. | 22. | 30. | 36. | 28. |
| 16663 | 29. | 42. | 41. | 39. | 36. | 49. | 41. | 45. | 28. | 8. | 42. | 39. | 30. |
| 16664 | 26. | 27. | 30. | 22. | 26. | 27. | 29. | 21. | 26. | 34. | 28. | 21. | 26. |
| 16665 | 17. | 15. | 23. | 21. | 22. | 23. | 24. | 26. | 24. | 18. | 21. | 24. | 24. |
| 16666 | 21. | 24. | 28. | 28. | 24. | 27. | 29. | 28. | 24. | 17. | 31. | 28. | 26. |
| 16667 | 24. | 23. | 30. | 33. | 27. | 24. | 30. | 31. | 30. | 20. | 33. | 39. | 31. |
| 16668 | 29. | 57. | 35. | 28. | b | b | 50. | 29. | 31. | b | 44. | 20. | 44. |
| 16669 | 27. | 27. | 29. | 35. | 30. | 34. | 38. | 38. | 29. | 35. | 33. | 35. | 36. |
| 16670 | 34. | 39. | 30. | 34. | 32. | 43. | 31. | 38. | 30. | 37. | 37. | b | b |
| 16671 | 29. | 34. | 38. | 34. | 29. | 42. | 38. | 38. | 29. | 39. | 39. | 35. | 32. |
| 16672 | 23. | 25. | 19. | 26. | 24. | 29. | 21. | 22. | 22. | 21. | 17. | 25. | 21. |
| 16673 | 23. | 27. | 23. | 16. | 32. | 23. | 29. | 17. | 29. | 24. | 28. | 16. | 32. |
| 16674 | 23. | 20. | 16. | 25. | 28. | 27. | 25. | 15. | 20. | 26. | 29. | 25. | 13. |
| 16675 | 29. | 38. | 37. | 35. | 45. | 49. | 46. | 35. | 38. | 48. | 41. | 35. | 44. |
| 16676 | 27. | 25. | 24. | 32. | 30. | 31. | 25. | 31. | 26. | 24. | 20. | 31. | 31. |
| 16677 | 28. | 25. | 31. | 35. | 21. | 33. | 37. | 32. | 23. | 27. | 38. | 49. | 30. |
| 16678 | 16. | 26. | 32. | 26. | 14. | 33. | 26. | 21. | 16. | 28. | 44. | 29. | 17. |
| 16679 | 28. | 30. | 26. | 22. | 27. | 32. | 36. | 21. | 29. | 31. | 34. | 25. | 34. |
| 16680 | 17. | 29. | 29. | 26. | 20. | 28. | 30. | 29. | 24. | 23. | 28. | 22. | 21. |
| 16681 | 36. | 35. | 29. | 26. | 34. | 45. | 41. | 36. | 34. | 37. | 38. | 31. | 36. |
| 16682 | 22. | 22. | 29. | 13. | 5. | 38. | 34. | 32. | 28. | 21. | 30. | 32. | 28. |
| 16683 | 35. | 35. | 43. | 39. | 43. | 48. | 51. | b | 41. | 42. | b | 57. | 54. |
| 16684 | 25. | 26. | 32. | 36. | 38. | 32. | 41. | 40. | 32. | 20. | 38. | 35. | 32. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C32 (PAGE 4): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 | 17. | 29. | 31. | 28. | 18. | 32. | 31. | 32. | 20. | 27. | 38. | 41. | 21. |
| 16686 | 27. | 29. | 24. | 21. | 23. | 30. | 24. | 19. | 22. | 26. | 22. | 21. | 24. |
| 16687 | 34. | 38. | 30. | 25. | 31. | 43. | 33. | 30. | 33. | 39. | 43. | 23. | 34. |
| 16688 | 30. | 28. | 34. | 23. | 28. | 31. | 29. | 26. | 28. | 30. | 31. | 26. | 31. |
| 16689 | 30. | 31. | 30. | 25. | 34. | 36. | 35. | 28. | 28. | 36. | 27. | 21. | 30. |
| 16690 | 26. | 27. | 29. | 23. | 31. | 32. | 33. | 23. | 27. | 29. | 25. | 21. | 32. |
| 16691 | 19. | 26. | 28. | 27. | 26. | 27. | 29. | 27. | 21. | 25. | 26. | 25. | 22. |
| 16692 | 26. | 29. | 21. | 19. | 31. | 32. | 23. | 16. | 22. | 28. | 22. | 21. | 21. |
| 16693 | 28. | 25. | 28. | 25. | 30. | 35. | 31. | 27. | 32. | b | b | b | b |
| 16694 | 31. | b | 34. | 30. | 34. | 44. | 40. | 33. | 25. | 32. | 37. | 33. | 24. |
| 16695 | 37. | 39. | 31. | 29. | 40. | 36. | 37. | 36. | 34. | 37. | 38. | 27. | 38. |
| 16696 | b | b | b | b | b | b | b | b | b | 50. | b | b | b |
| 16697 | 25. | 22. | 28. | 34. | 25. | 25. | 27. | 24. | 31. | 23. | 26. | 27. | 30. |
| 16698 | 28. | 37. | 28. | 33. | 40. | 47. | 49. | 33. | 31. | 28. | 35. | 26. | 31. |
| 16699 | 27. | 34. | 28. | 26. | 36. | 48. | 34. | 26. | 33. | 31. | 33. | 34. | 37. |
| 16700 | 38. | 43. | 42. | 35. | 44. | 53. | 49. | 53. | 28. | 45. | 43. | 38. | 28. |
| 16701 | 28. | 27. | 28. | 20. | 36. | 37. | 26. | 26. | 24. | 34. | 32. | 24. | 30. |
| 16702 | 31. | 40. | 38. | 28. | 29. | 37. | 34. | 25. | 22. | 27. | 30. | 25. | 32. |
| 16703 | 22. | 20. | 21. | 13. | 22. | 20. | 20. | 18. | 17. | 34. | 24. | 15. | 22. |
| 16704 | 22. | 33. | 31. | 30. | 34. | 40. | 34. | 29. | 34. | 43. | 37. | 31. | 41. |
| 16705 | 22. | 23. | 32. | 28. | 28. | 28. | 26. | 29. | 32. | 29. | 24. | 26. | 32. |
| 16706 | 30. | 29. | 34. | 21. | 28. | 51. | 31. | 33. | 26. | 38. | 37. | 25. | 35. |
| 16707 | 19. | 57. | 38. | 31. | 38. | 52. | 28. | 26. | 52. | b | 54. | 47. | b |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C32 (PAGE 5): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 | 22. | 21. | 19. | 15. | 24. | 19. | 18. | 19. | 21. | 21. | 17. | 20. | 26. |
| 16709 | 28. | 40. | 39. | 28. | 40. | 46. | 30. | 28. | 31. | 41. | 35. | 31. | 40. |
| 16710 | 35. | 41. | 38. | 35. | b | 42. | 45. | 50. | 39. | 39. | 43. | 45. | 40. |
| 16711 | 28. | 29. | 20. | 23. | 27. | 23. | 29. | 20. | 26. | 35. | 22. | 24. | 24. |
| 16712 | 32. | 29. | 26. | 34. | 38. | 38. | 31. | 35. | 37. | 40. | 26. | 39. | 41. |
| 16713 | 28. | 29. | 28. | 20. | 30. | 31. | 27. | 17. | 31. | b | 41. | 18. | b |
| 16714 | 26. | 32. | 29. | 30. | 24. | 33. | 35. | 32. | 31. | 23. | 38. | b | b |
| 16715 | 31. | 25. | 31. | 35. | 28. | 24. | 31. | 33. | 25. | 15. | 31. | 26. | 22. |
| 16716 | 25. | 23. | 22. | 26. | 25. | 26. | 23. | 25. | 28. | 21. | 19. | 27. | 24. |
| 16717 | 19. | 33. | 30. | 28. | 20. | 35. | 34. | 32. | 20. | 30. | 36. | 37. | 22. |
| 16718 | 26. | 43. | 33. | 24. | 34. | 38. | 35. | 26. | 34. | 36. | 37. | 24. | 35. |
| 16719 | 27. | 25. | 27. | 31. | 28. | 31. | 30. | 31. | 30. | 33. | 29. | 32. | 34. |
| 16720 | 25. | 28. | 20. | 23. | 27. | 28. | 24. | 22. | 23. | 11. | 18. | 21. | 22. |
| 16721 | 17. | 18. | 26. | 22. | 23. | 18. | 30. | 24. | 20. | 14. | 27. | 23. | 18. |
| 16722 | 16. | 2. | 16. | 28. | 34. | 29. | 30. | 37. | 29. | 18. | 31. | 35. | 27. |
| 16723 | 33. | 30. | 24. | 33. | 38. | b | 47. | 32. | b | 54. | 59. | b | 50. |
| 16724 | 19. | 25. | 29. | 27. | 23. | 28. | 33. | 21. | 28. | 28. | 30. | 27. | 26. |
| 16725 | 31. | 29. | 28. | 23. | 33. | 32. | 32. | 22. | 27. | 27. | 25. | 19. | 33. |
| 16726 | 10. | 23. | 21. | 24. | 28. | 31. | 27. | 26. | 31. | 26. | 19. | 27. | 26. |
| 16727 | 35. | 23. | 34. | 37. | 43. | 43. | 45. | 45. | 34. | 42. | 49. | 42. | 53. |
| 16728 | 46. | b | 45. | 35. | 40. | b | 52. | 43. | 44. | b | 55. | 40. | 48. |
| 16729 | b | 37. | 39. | 34. | 18. | 43. | 38. | 36. | 23. | 31. | 41. | 32. | 18. |
| 16730 | 23. | 31. | 30. | 27. | 32. | 39. | 33. | 30. | 28. | 20. | 35. | 37. | 31. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 1): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 P | 32. | 30. | 28. | 29. | 34. | 32. | 32. | 31. | 31. | 32. | 35. | 31. | 33. |
| 16617 P | 39. | 49. | 54. | 46. | 53. | 46. | 58. | 56. | 55. | 53. | 45. | a | 42. |
| 16618 P | 35. | 37. | 38. | 41. | 46. | 46. | 46. | 49. | 41. | 47. | 47. | 48. | 49. |
| 16619 P | 35. | 27. | 33. | 44. | 38. | 38. | 47. | 41. | 43. | 44. | 59. | 57. | 55. |
| 16620 P | 25. | 33. | 31. | 33. | 31. | 31. | 36. | 29. | 31. | 27. | 33. | 42. | 33. |
| 16621 P | 49. | 41. | 48. | 50. | 44. | 46. | 44. | 40. | 45. | 46. | 51. | 63. | 45. |
| 16623 P | 44. | 37. | 44. | 41. | 51. | 45. | 47. | 45. | 48. | 46. | 49. | 50. | 55. |
| 16625 P | 37. | 47. | 53. | 55. | 61. | 54. | 54. | 53. | 47. | 49. | 53. | 50. | 62. |
| 16626 P | 31. | 30. | 37. | 45. | 41. | 38. | 42. | 42. | 38. | 35. | 42. | 49. | 49. |
| 16629 P | 23. | 27. | 38. | 33. | 34. | 36. | 35. | 35. | 34. | 37. | 38. | 45. | 36. |
| 16630 P | a | a | a | a | a | a | a | a | a | a | a | a | a |
| 16631 P | 32. | 39. | 40. | 38. | 44. | 47. | 40. | 40. | 42. | 47. | 49. | 52. | 50. |
| 16634 P | a | a | a | a | a | a | a | a | a | a | a | a | 59. |
| 16635 P | 29. | 40. | 37. | 30. | 39. | 49. | 39. | 39. | 43. | 58. | 44. | 51. | 49. |
| 16636 P | 39. | 38. | 43. | 52. | 47. | 40. | 34. | 44. | 47. | 46. | 55. | 51. | 46. |
| 16637 P | 37. | 43. | 40. | 44. | 44. | 37. | 41. | 39. | 45. | 51. | 39. | 39. | 48. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 2): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | |
| 16616 P | 30. | 30. | 34. | 40. | 33. | 39. | 38. | 35. | | | | |
| 16617 P | 51. | 51. | 56. | 57. | 59. | 57. | 43. | 38. | | | | |
| 16618 P | 44. | 52. | 45. | 56. | 44. | 54. | 50. | 37. | | | | |
| 16619 P | 50. | 56. | 51. | 55. | 34. | 46. | 38. | 43. | | | | |
| 16620 P | 40. | 40. | 39. | 39. | 50. | 46. | 41. | 30. | | | | |
| 16621 P | 39. | 47. | 70. | 66. | 35. | 30. | 37. | | | | | |
| 16623 P | 44. | 48. | 52. | 58. | 37. | 48. | 43. | 48. | | | | |
| 16625 P | 50. | 55. | 65. | 52. | 43. | 47. | 45. | 44. | | | | |
| 16626 P | 40. | 48. | 47. | 48. | 49. | 45. | 48. | 41. | | | | |
| 16629 P | 39. | 36. | 44. | 49. | 46. | 40. | 46. | 46. | | | | |
| 16630 P | a | a | a | a | 42. | a | 47. | a | | | | |
| 16631 P | 47. | 41. | 40. | 50. | 45. | 32. | 38. | 35. | | | | |
| 16634 P | a | a | a | a | a | b | 77. | a | | | | |
| 16635 P | 51. | 61. | 47. | 49. | 70. | a | b | 43. | | | | |
| 16636 P | 35. | 49. | 50. | 51. | 54. | 47. | 42. | | | | | |
| 16637 P | 50. | 51. | 61. | 63. | 63. | 41. | 42. | 49. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE C33 (PAGE 3): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16640 P | 49. | 48. | 53. | 57. | 65. | a | 64. | 51. | a | 53. | 58. | 55. | 57. |
| 16641 P | 30. | 31. | 32. | 36. | 40. | 33. | 36. | 33. | 33. | 33. | 42. | 35. | 42. |
| 16643 P | 31. | 44. | 45. | 45. | 45. | 35. | 42. | 54. | 38. | 48. | 44. | 47. | a |
| 16644 P | 30. | 36. | 35. | 40. | 45. | 39. | 39. | 30. | a | 38. | 43. | 38. | 38. |
| 16645 P | 32. | 51. | 45. | 49. | 47. | 37. | 46. | 51. | 47. | 46. | 60. | 66. | 50. |
| 16646 P | 34. | 39. | 34. | 40. | 40. | 34. | 41. | 38. | 39. | 39. | 47. | 44. | 48. |
| 16647 P | 37. | 42. | 45. | 50. | 48. | 50. | 47. | 46. | 42. | 49. | 49. | 52. | 52. |
| 16649 P | 40. | 43. | 47. | 42. | 51. | 50. | 47. | 52. | 46. | 56. | 52. | 60. | 56. |
| 16650 P | 48. | 53. | 52. | 46. | 53. | 51. | 50. | 53. | 49. | 52. | 49. | 47. | 53. |
| 16651 P | 53. | a | a | a | 56. | 48. | 49. | 47. | 44. | a | 43. | 36. | 50. |
| 16653 P | 29. | 40. | 45. | 39. | 45. | 46. | 49. | 37. | 41. | 59. | 56. | 49. | 56. |
| 16654 P | 35. | 51. | 48. | 54. | 50. | 57. | 50. | 59. | 53. | 63. | 61. | a | 62. |
| 16655 P | 32. | 37. | 39. | 37. | 37. | 38. | 32. | 36. | 39. | 39. | 41. | 39. | 39. |
| 16656 P | 28. | 36. | 45. | 51. | 48. | 44. | 50. | 48. | 56. | 53. | 52. | 54. | 48. |
| 16657 P | 37. | 34. | 57. | 45. | 45. | 55. | 46. | 47. | 44. | 49. | 48. | 43. | 50. |
| 16659 P | 5. | 22. | 19. | 19. | 14. | 39. | 41. | 38. | 38. | 42. | 48. | 44. | 46. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 4): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | |
| 16640 P | 60. | 60. | 58. | 63. | 52. | 51. | 50. | 41. | | | | |
| 16641 P | 38. | 44. | 37. | 41. | 43. | 41. | 42. | 44. | | | | |
| 16643 P | 62. | 53. | 56. | 46. | 68. | 58. | 47. | 42. | | | | |
| 16644 P | 46. | 38. | 45. | 45. | 53. | 42. | 40. | 49. | | | | |
| 16645 P | 57. | 56. | 54. | 53. | 60. | 67. | 55. | a | | | | |
| 16646 P | 48. | 44. | 54. | 56. | 58. | 39. | 50. | 46. | | | | |
| 16647 P | 49. | 54. | 59. | 60. | 47. | 48. | 36. | a | | | | |
| 16649 P | 55. | 53. | 57. | 60. | 60. | 47. | 47. | 51. | | | | |
| 16650 P | 50. | 40. | 37. | 59. | 58. | 67. | 42. | 42. | | | | |
| 16651 P | 50. | 52. | 81. | 65. | 78. | 53. | 38. | 48. | | | | |
| 16653 P | 44. | 50. | 51. | 45. | 53. | a | 64. | 40. | | | | |
| 16654 P | 57. | 68. | 63. | 59. | 69. | 63. | 66. | 44. | | | | |
| 16655 P | 40. | 39. | 42. | 45. | 42. | a | a | 52. | | | | |
| 16656 P | 45. | 41. | 47. | 45. | 45. | 49. | 43. | 52. | | | | |
| 16657 P | 46. | 46. | 58. | 55. | 55. | 45. | 57. | 47. | | | | |
| 16659 P | 44. | 46. | 47. | 40. | 48. | 53. | 47. | 33. | 29. | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 5): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 P | 26. | 40. | 34. | 40. | 39. | 34. | 35. | 38. | 35. | 36. | 41. | 41. | 49. |
| 16664 P | 26. | 36. | 34. | 39. | 43. | 44. | 33. | 40. | 43. | 41. | 45. | 53. | 45. |
| 16665 P | 25. | 42. | 34. | 35. | 42. | 37. | 40. | 43. | 35. | 39. | 40. | 50. | 41. |
| 16666 P | 30. | 44. | 35. | 43. | 37. | 39. | 40. | 38. | 37. | 40. | 43. | 51. | 56. |
| 16667 P | 30. | 42. | 43. | 42. | 44. | 40. | 42. | 42. | 43. | 44. | 45. | 47. | 49. |
| 16668 P | 31. | 37. | 54. | 50. | a | 46. | 42. | 46. | 41. | 40. | 52. | 48. | 48. |
| 16669 P | 31. | 42. | 45. | 46. | 48. | 56. | 43. | 47. | 46. | 47. | 54. | 52. | 48. |
| 16670 P | 43. | a | a | a | a | a | a | a | 49. | 62. | a | a | 48. |
| 16673 P | 32. | 39. | 42. | 38. | 40. | 40. | 43. | 42. | 39. | 47. | 49. | 47. | 52. |
| 16675 P | 37. | 53. | 46. | 51. | 47. | 53. | 50. | 59. | 52. | 49. | 52. | 49. | 55. |
| 16676 P | 37. | 41. | 42. | 36. | 41. | 41. | 47. | 48. | 51. | 38. | 42. | 44. | 45. |
| 16678 P | 38. | 36. | a | a | 44. | 48. | 82. | 48. | 37. | 62. | a | 65. | 29. |
| 16679 P | 29. | 43. | 45. | 46. | 44. | 52. | 43. | 46. | 52. | 51. | 53. | 56. | 62. |
| 16680 P | 35. | 31. | 37. | 38. | 36. | 37. | 36. | 38. | 38. | 36. | 37. | 36. | 40. |
| 16681 P | 41. | 44. | 39. | 47. | 48. | 57. | 44. | 58. | 51. | 50. | 47. | 51. | 48. |
| 16683 P | 43. | 53. | 64. | 54. | 49. | 60. | 61. | 53. | 59. | 67. | a | a | 71. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 6): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | |
| 16662 P | 34. | 48. | 48. | 37. | 46. | 46. | 41. | 28. | | | | |
| 16664 P | 49. | 43. | 49. | 53. | 52. | 38. | 40. | 37. | | | | |
| 16665 P | 40. | 41. | 47. | 45. | 45. | 53. | 40. | 38. | | | | |
| 16666 P | 42. | 45. | 44. | 44. | 51. | 44. | 42. | 38. | | | | |
| 16667 P | 42. | 44. | 50. | 44. | 47. | 44. | 44. | 28. | 52. | | | |
| 16668 P | 50. | 39. | 46. | 44. | 39. | 44. | 38. | 38. | | | | |
| 16669 P | 46. | a | 40. | 54. | 48. | 50. | 50. | 45. | | | | |
| 16670 P | 47. | 62. | a | 70. | 62. | 44. | a | 46. | | | | |
| 16673 P | 48. | 44. | 51. | 40. | 35. | 40. | 38. | 44. | | | | |
| 16675 P | 52. | 49. | 59. | 61. | 60. | 40. | 38. | 37. | | | | |
| 16676 P | 48. | 53. | 52. | 52. | 57. | 55. | 42. | 51. | | | | |
| 16678 P | 37. | a | b | 60. | a | a | 75. | | | | | |
| 16679 P | 56. | 48. | 53. | 61. | 58. | 41. | 46. | 56. | | | | |
| 16680 P | 38. | 38. | 42. | 45. | 42. | 41. | 38. | | | | | |
| 16681 P | 49. | 49. | 64. | 75. | 72. | 47. | 40. | 51. | | | | |
| 16683 P | a | 75. | a | 67. | 65. | 72. | 55. | 32. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE C33 (PAGE 7): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 P | 48. | 31. | 44. | 53. | 62. | 58. | a | a | a | a | a | a | a |
| 16686 P | 27. | 33. | 38. | 39. | 35. | 39. | 35. | 32. | 37. | 40. | 43. | 43. | 50. |
| 16687 P | 42. | 48. | 50. | 54. | 48. | 54. | 46. | 51. | 44. | 50. | 60. | 58. | 55. |
| 16688 P | 38. | 37. | 46. | 40. | 45. | 34. | 42. | 48. | 44. | 47. | 55. | a | 49. |
| 16689 P | 21. | 34. | 42. | 39. | 47. | 55. | 50. | 48. | 47. | 50. | 57. | 56. | 52. |
| 16690 P | 38. | 46. | 43. | 44. | 43. | 39. | 44. | 40. | 42. | 49. | 47. | 50. | 43. |
| 16692 P | 31. | 40. | 39. | 38. | 28. | 40. | 43. | 41. | 32. | 40. | 48. | 42. | 45. |
| 16693 P | 58. | a | 52. | a | 21. | 73. | 43. | 35. | 34. | 40. | 42. | 64. | 46. |
| 16695 P | 40. | 34. | 41. | 46. | 46. | 43. | 45. | 65. | 56. | 54. | 49. | 53. | 57. |
| 16696 P | a | a | a | a | a | a | a | a | a | a | a | a | a |
| 16697 P | 26. | 39. | 30. | 35. | 38. | 44. | 34. | 33. | 39. | 41. | 40. | 41. | 40. |
| 16698 P | 38. | 49. | 51. | 46. | 44. | 55. | 46. | 50. | 46. | 48. | 45. | 40. | 47. |
| 16699 P | 44. | 51. | 48. | 52. | 55. | a | 61. | 60. | 59. | 62. | 53. | 58. | 54. |
| 16701 P | 28. | 37. | 39. | 41. | 40. | 36. | 35. | 37. | 35. | 38. | 36. | 40. | 36. |
| 16706 P | 27. | 39. | 35. | 42. | 44. | 40. | 36. | 41. | 30. | 42. | 64. | 46. | 53. |
| 16707 P | 35. | a | 50. | 46. | 46. | 60. | 28. | a | 38. | a | 59. | 34. | 24. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 8): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | |
| 16685 P | a | a | a | a | 62. | 69. | 45. | a | | | | |
| 16686 P | 46. | 33. | 50. | 48. | 51. | 36. | 42. | 37. | | | | |
| 16687 P | 51. | 48. | 52. | 53. | 62. | 37. | 40. | 39. | | | | |
| 16688 P | 55. | 47. | 69. | 56. | 67. | 46. | 45. | 33. | | | | |
| 16689 P | 58. | 49. | 58. | 59. | 54. | 48. | 46. | 41. | | | | |
| 16690 P | 49. | 45. | 51. | 50. | 52. | 47. | 41. | 42. | | | | |
| 16692 P | 39. | 36. | 44. | 43. | 51. | 50. | 46. | 40. | 42. | | | |
| 16693 P | 59. | 11. | a | 56. | 80. | 42. | 37. | 43. | | | | |
| 16695 P | 47. | 57. | 68. | 74. | 66. | 46. | 50. | 41. | | | | |
| 16696 P | a | 70. | a | 73. | a | 47. | 56. | 73. | | | | |
| 16697 P | 49. | 39. | 52. | 54. | 44. | 32. | 32. | 34. | | | | |
| 16698 P | 42. | 57. | 56. | 57. | 62. | 45. | 41. | 64. | | | | |
| 16699 P | 52. | 55. | 52. | 55. | 59. | 51. | 44. | 46. | a | | | |
| 16701 P | 38. | 37. | 46. | 53. | 50. | 33. | 43. | 50. | | | | |
| 16706 P | 45. | 42. | 51. | 58. | 57. | 44. | 44. | 47. | | | | |
| 16707 P | 31. | 26. | 38. | 50. | 39. | 32. | 33. | 31. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 9): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 P | 23. | 34. | 31. | 29. | 40. | 47. | 27. | 37. | 26. | 34. | 31. | 31. | 36. |
| 16709 P | 40. | 44. | 46. | 41. | 48. | 51. | 56. | 51. | 51. | 58. | a | 55. | 53. |
| 16711 P | 38. | 41. | 41. | 34. | 44. | 45. | 40. | 42. | 43. | 46. | 54. | 48. | 44. |
| 16712 P | 37. | 49. | 47. | 53. | 49. | 50. | 49. | 50. | 47. | 51. | 60. | a | 60. |
| 16713 P | 45. | 44. | a | 48. | 71. | 47. | a | 58. | 46. | 37. | 67. | 63. | 57. |
| 16715 P | 26. | 39. | 39. | 44. | 32. | 34. | 37. | 42. | 33. | 38. | 42. | 44. | 42. |
| 16716 P | 25. | 29. | 29. | 31. | 31. | 34. | 43. | 33. | 29. | 36. | 43. | 42. | 41. |
| 16717 P | 41. | 39. | 45. | 53. | 41. | 40. | 44. | 39. | 41. | 40. | 44. | 43. | 45. |
| 16718 P | 38. | 43. | 49. | 43. | 47. | 48. | 47. | 42. | 49. | 48. | 48. | 37. | 37. |
| 16719 P | 29. | 39. | 47. | 42. | 43. | 44. | 46. | 46. | 50. | 43. | 44. | 50. | 47. |
| 16722 P | 20. | 41. | 52. | 50. | 43. | 43. | 46. | 47. | 47. | 45. | 46. | 50. | 46. |
| 16723 P | 34. | 70. | 42. | a | 44. | 43. | 43. | 37. | 41. | 42. | a | 42. | 57. |
| 16724 P | 31. | 37. | 37. | 34. | 34. | 36. | 40. | 39. | 38. | 42. | 41. | 41. | 47. |
| 16725 P | 33. | 39. | 43. | 43. | 49. | 39. | 39. | 43. | 41. | 40. | 47. | 54. | a |
| 16728 P | 43. | 49. | 50. | 56. | 51. | 64. | 55. | 55. | 55. | 64. | a | 58. | 54. |
| 16730 P | 36. | 43. | 45. | 44. | 43. | 50. | 47. | 44. | 45. | 53. | 34. | 47. | 43. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C33 (PAGE 10): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | |
| 16708 P | 37. | 32. | 41. | 50. | 46. | 41. | 38. | 32. | | | | |
| 16709 P | 50. | 41. | 49. | 58. | 54. | 47. | 36. | 42. | | | | |
| 16711 P | 48. | 63. | 49. | 60. | 69. | 41. | 46. | 37. | | | | |
| 16712 P | a | 63. | 66. | 78. | 69. | 41. | 44. | 51. | | | | |
| 16713 P | 68. | 46. | 54. | 48. | 48. | 35. | 32. | 36. | | | | |
| 16715 P | 39. | 37. | 43. | 41. | 50. | 47. | 43. | 43. | | | | |
| 16716 P | 48. | 58. | a | 54. | 55. | 59. | 46. | 31. | | | | |
| 16717 P | 39. | 55. | 49. | 51. | a | 39. | 44. | 46. | | | | |
| 16718 P | 40. | 33. | 50. | 48. | 48. | 53. | 42. | 27. | | | | |
| 16719 P | 49. | 48. | 48. | 52. | 45. | 44. | 38. | 37. | | | | |
| 16722 P | 39. | 47. | 43. | 47. | 47. | 46. | 43. | 44. | | | | |
| 16723 P | 68. | 41. | 53. | 49. | 55. | 43. | 39. | 50. | | | | |
| 16724 P | 47. | 47. | 46. | 55. | 39. | 46. | 54. | | | | | |
| 16725 P | 51. | 47. | 52. | 54. | 52. | 35. | 48. | 54. | | | | |
| 16728 P | 52. | 50. | 59. | 53. | 66. | 54. | 44. | 45. | | | | |
| 16730 P | 51. | a | 41. | 40. | 48. | 43. | 50. | 50. | 46. | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE C34 (PAGE 1): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | |
| 16616 | 30. | 37. | 56. | 62. | 59. | 67. | 64. | 67. | 69. |
| 16617 | 51. | 70. | 83. | 106. | 74. | 57. | 68. | 65. | 79. |
| 16618 | 56. | 72. | 83. | 93. | 73. | 64. | 73. | 85. | 88. |
| 16619 | 35. | 40. | 50. | 53. | 51. | 52. | 55. | 63. | 58. |
| 16620 | 37. | 30. | 56. | 66. | 52. | a | 64. | 74. | 65. |
| 16621 | 32. | 42. | 48. | 44. | 47. | 41. | 57. | 62. | 46. |
| 16623 | 37. | 51. | 65. | 70. | 67. | 68. | 67. | 79. | 83. |
| 16625 | 36. | 49. | 61. | 81. | 69. | 67. | 52. | 62. | 46. |
| 16626 | 32. | 41. | 49. | a | 62. | 65. | 67. | 68. | 72. |
| 16629 | 38. | 40. | 54. | 84. | 80. | a | 79. | 55. | 71. |
| 16630 | 58. | 66. | a | 34. | 72. | b | b | 70. | 80. |
| 16631 | 36. | 43. | 47. | 57. | 63. | 60. | 65. | 68. | 64. |
| 16634 | 46. | 64. | a | 124. | 75. | 107. | a | 98. | 83. |
| 16635 | 50. | 42. | 64. | 85. | 73. | 80. | 95. | 96. | 99. |
| 16636 | 40. | 36. | 60. | 67. | 62. | 57. | 72. | 69. | 61. |
| 16637 | 51. | 55. | 63. | 49. | 63. | 60. | 69. | 62. | 51. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE C34 (PAGE 2): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | |
| 16640 | 31. | 46. | 50. | 61. | 65. | 65. | 76. | 70. | 87. |
| 16641 | 25. | 38. | 50. | 50. | 56. | 58. | 69. | 75. | 60. |
| 16643 | 41. | 44. | 73. | 69. | 63. | 60. | 56. | 57. | 46. |
| 16644 | 24. | 55. | 62. | 62. | 46. | 55. | 56. | 72. | 55. |
| 16645 | 41. | 61. | 70. | 65. | 77. | 70. | 75. | 75. | 64. |
| 16646 | 38. | 42. | 54. | 59. | 68. | 61. | 66. | 83. | 56. |
| 16647 | 34. | 41. | 54. | 56. | 58. | 52. | 68. | 63. | 61. |
| 16649 | 35. | 46. | 51. | 53. | 51. | 55. | 57. | 68. | 51. |
| 16650 | 45. | 46. | 61. | 65. | 55. | 78. | 51. | 70. | 66. |
| 16651 | 40. | 52. | 68. | 84. | 71. | 72. | 74. | 72. | 88. |
| 16653 | 35. | 48. | 71. | 72. | 73. | 64. | 72. | 82. | 73. |
| 16654 | 43. | 61. | 73. | 65. | 56. | 50. | 57. | 66. | 62. |
| 16655 | 47. | 44. | 67. | 79. | 60. | 60. | 74. | 77. | 62. |
| 16656 | 44. | 48. | 61. | 89. | 63. | 53. | 69. | 83. | 65. |
| 16657 | 47. | 43. | 60. | 74. | 64. | 50. | 72. | 62. | 72. |
| 16659 | 25. | 40. | 63. | 71. | 47. | 55. | 63. | 66. | 63. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C34 (PAGE 3): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | |
| 16662 | 32. | 39. | 51. | 52. | 47. | 52. | 61. | 55. | 56. |
| 16664 | 31. | 24. | 38. | 33. | 48. | 43. | 45. | 56. | 53. |
| 16665 | 14. | 40. | 45. | 40. | 42. | 67. | 53. | 61. | 58. |
| 16666 | 39. | 57. | 61. | 60. | 81. | 57. | 57. | 75. | 66. |
| 16667 | 28. | 42. | 37. | 60. | 52. | 55. | 59. | 58. | 61. |
| 16668 | 33. | 51. | 62. | 61. | 64. | 68. | 66. | 69. | 71. |
| 16669 | 35. | 49. | 71. | 83. | 61. | 58. | 62. | 68. | 64. |
| 16670 | 50. | 60. | 75. | 61. | 46. | 62. | 90. | 76. | 57. |
| 16673 | 20. | 46. | 52. | 64. | 64. | 66. | 71. | 78. | 72. |
| 16675 | 26. | 29. | 52. | 57. | 60. | 54. | 63. | 75. | 76. |
| 16676 | 41. | 53. | 66. | 86. | 76. | 62. | 78. | 72. | 72. |
| 16678 | 18. | 86. | 104. | 114. | 63. | 46. | 62. | 74. | 43. |
| 16679 | 35. | 47. | 60. | 73. | 63. | 57. | 74. | 66. | 65. |
| 16680 | 23. | 37. | 55. | 56. | 59. | 53. | 65. | 68. | 73. |
| 16681 | 48. | 50. | 51. | 37. | 48. | 50. | 65. | 66. | 59. |
| 16683 | 39. | 33. | 57. | 49. | 60. | 57. | 113. | 69. | 74. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C34 (PAGE 4): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | |
| 16685 | 29. | 48. | 63. | 64. | 72. | a | 92. | 80. | 57. |
| 16686 | 27. | 42. | 60. | 68. | 69. | 62. | 56. | 68. | 79. |
| 16687 | 29. | 43. | 52. | 57. | 58. | 64. | 65. | 64. | 63. |
| 16688 | 41. | 43. | 49. | 67. | 62. | 56. | 52. | 73. | 50. |
| 16689 | 35. | 53. | 63. | 75. | 62. | 60. | a | 73. | 7. |
| 16690 | 31. | 42. | 46. | 48. | 55. | 51. | 39. | 70. | 61. |
| 16692 | 21. | 56. | 44. | 42. | 57. | 55. | 57. | 64. | 54. |
| 16693 | 39. | b | 57. | 71. | 56. | 62. | 66. | 64. | 61. |
| 16695 | 47. | 52. | 67. | 69. | 28. | 59. | 72. | 78. | 64. |
| 16696 | 37. | 54. | 63. | 57. | 56. | 58. | 78. | 68. | 122. |
| 16697 | 29. | 30. | 48. | 54. | 56. | 51. | 58. | 61. | 60. |
| 16698 | 37. | 47. | 65. | 69. | 72. | 61. | 64. | 77. | 68. |
| 16699 | 39. | 65. | 74. | 74. | 74. | 68. | 66. | 79. | 73. |
| 16701 | 36. | 43. | 68. | 63. | 76. | 52. | 59. | 60. | 48. |
| 16706 | 36. | 47. | 54. | 70. | 58. | 58. | 66. | 65. | 54. |
| 16707 | 36. | 42. | 57. | 47. | 50. | 47. | 47. | 56. | 46. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE C34 (PAGE 5): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | |
| 16708 | 33. | 33. | 40. | 44. | 48. | 56. | 54. | 50. | 57. |
| 16709 | 37. | 48. | 59. | 61. | 57. | 52. | 56. | 57. | 73. |
| 16711 | 27. | 40. | 47. | 60. | 56. | 56. | 62. | 70. | 69. |
| 16712 | 45. | 52. | 62. | 81. | 55. | 73. | 67. | 78. | 83. |
| 16713 | 13. | 39. | 50. | 66. | 61. | 62. | 62. | 54. | 66. |
| 16715 | 32. | 48. | 51. | 62. | 50. | 51. | 67. | 56. | 71. |
| 16716 | 46. | 56. | 58. | 69. | 46. | 71. | 71. | 64. | 79. |
| 16717 | 30. | 55. | 63. | 72. | 73. | 60. | 77. | 78. | 61. |
| 16718 | 28. | 40. | 41. | 54. | 64. | 53. | 64. | 68. | 67. |
| 16719 | 30. | 33. | 36. | 49. | 53. | 46. | 73. | 56. | 64. |
| 16722 | 36. | 51. | 50. | 57. | 59. | 60. | 66. | 72. | 70. |
| 16723 | 54. | 54. | 68. | 78. | 72. | 75. | 83. | 78. | 81. |
| 16724 | 35. | 32. | 54. | 61. | 59. | 45. | 63. | 70. | 51. |
| 16725 | 41. | 48. | 64. | 67. | 63. | a | 64. | 79. | 67. |
| 16728 | 30. | 42. | 61. | 81. | 67. | 70. | 83. | 88. | 89. |
| 16730 | 47. | 61. | 62. | 53. | 55. | 56. | 65. | 77. | 75. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.

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TABLE C35 (PAGE 1): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 | 16. | 17. | 15. | 12. | 19. | 16. | 16. | 13. | 16. | 17. | 13. | 10. | 18. |
| 16617 | 21. | 17. | 21. | 21. | 20. | 18. | 22. | 19. | 12. | 14. | 20. | 21. | 23. |
| 16618 | 21. | 20. | 17. | 23. | 22. | 22. | 22. | 19. | 24. | 21. | 21. | 19. | 18. |
| 16619 | 16. | 18. | 19. | 19. | 16. | 22. | 20. | 21. | 17. | 17. | 19. | 18. | 20. |
| 16620 | 13. | 11. | 16. | 19. | 19. | 19. | 18. | 22. | 19. | 13. | 18. | 19. | 20. |
| 16621 | 16. | 12. | 19. | 18. | 19. | 20. | 22. | 20. | 17. | 17. | 24. | 18. | 20. |
| 16622 | 14. | 14. | 20. | 18. | 15. | 18. | 61. | 18. | 16. | 19. | 20. | 19. | 15. |
| 16623 | 15. | 22. | 20. | 24. | 20. | 27. | 21. | 22. | 17. | 21. | 24. | 24. | 22. |
| 16624 | 13. | 16. | 15. | 12. | 15. | 19. | 16. | 11. | 16. | 16. | 15. | 12. | 18. |
| 16625 | 15. | 21. | 19. | 21. | 18. | 21. | 20. | 18. | 16. | 22. | 19. | 19. | 18. |
| 16626 | 15. | 14. | 19. | 18. | 18. | 22. | 16. | 18. | b | 16. | 16. | 18. | 16. |
| 16627 | 10. | 17. | 17. | 18. | 11. | 20. | 22. | 20. | 14. | 16. | 20. | 17. | 15. |
| 16628 | 14. | 15. | 19. | 17. | 15. | 19. | 20. | 17. | 16. | 17. | 19. | 16. | 14. |
| 16629 | 15. | 19. | 19. | 16. | 19. | 24. | 20. | 17. | 18. | 19. | 20. | 16. | 21. |
| 16630 | 16. | 22. | 17. | 22. | 18. | 21. | 22. | 20. | 21. | 18. | 21. | 20. | 18. |
| 16631 | 22. | 23. | 22. | 14. | 23. | 23. | 25. | 14. | 22. | 25. | 21. | 13. | 23. |
| 16632 | 17. | 13. | 18. | 21. | 17. | 17. | 19. | 20. | 21. | 10. | 19. | 18. | 19. |
| 16633 | 14. | 15. | 18. | 16. | 14. | 20. | 16. | 18. | 14. | 14. | 17. | 17. | 13. |
| 16634 | 14. | 17. | 19. | 19. | 13. | 23. | 17. | 17. | 17. | 16. | 19. | 17. | 15. |
| 16635 | 14. | b | b | 16. | 14. | 11. | 16. | 70.c | b | 11. | 12. | 17. | 18. |
| 16636 | 15. | 16. | 18. | 18. | 15. | 17. | 19. | 17. | 15. | 17. | 17. | 13. | 16. |
| 16637 | 19. | 20. | 17. | 16. | 21. | 21. | 19. | 15. | 19. | 18. | 17. | 15. | 22. |
| 16638 | 16. | 13. | 14. | 19. | 15. | 17. | 16. | 18. | 17. | 12. | 15. | 17. | 17. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Value was incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C35 (PAGE 2): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16639 | 12. | 13. | 9. | 17. | 16. | 20. | 20. | 17. | b | 16. | 21. | 17. | 16. |
| 16640 | 12. | 19. | 18. | 15. | 18. | 22. | 22. | 18. | 18. | 20. | 19. | 20. | 20. |
| 16641 | 13. | 17. | 15. | 17. | 15. | 19. | 19. | 17. | 13. | 16. | 16. | 18. | 17. |
| 16642 | 17. | 20. | 19. | 20. | 18. | 24. | 22. | 19. | 16. | 21. | 15. | 18. | 21. |
| 16643 | 20. | 15. | 17. | 18. | 19. | 19. | 18. | 23. | 16. | 14. | 17. | 19. | 20. |
| 16644 | 19. | 20. | 22. | 17. | 21. | 24. | 20. | 18. | 24. | 19. | 21. | 19. | 24. |
| 16645 | 19. | 22. | 22. | 17. | 25. | 26. | 23. | 19. | 17. | 21. | 22. | 21. | 21. |
| 16646 | 15. | 19. | 15. | 15. | 17. | 21. | 18. | 15. | 18. | 16. | 18. | 14. | 19. |
| 16647 | 15. | 20. | 19. | 19. | 14. | 24. | 21. | 19. | 14. | 17. | 19. | 18. | 14. |
| 16648 | 17. | 18. | 14. | 19. | 21. | 21. | 18. | 17. | 18. | 18. | 19. | 17. | 20. |
| 16649 | 21. | 22. | 22. | 14. | 23. | 25. | 24. | 15. | 22. | 21. | 22. | 11. | 27. |
| 16650 | 18. | 20. | 19. | 21. | 21. | 23. | 18. | 20. | 18. | 18. | 13. | 19. | 24. |
| 16651 | 17. | 16. | 14. | 17. | 18. | 19. | 18. | 18. | 21. | 19. | 11. | 17. | 20. |
| 16652 | 15. | 17. | 16. | 23. | 17. | 20. | 21. | 18. | 17. | 18. | 22. | 21. | 20. |
| 16653 | 17. | 19. | 17. | 11. | 20. | 20. | 19. | 19. | 20. | 19. | 18. | 17. | 18. |
| 16654 | 18. | 18. | 18. | 21. | 21. | 30. | 20. | 22. | 20. | 16. | 20. | 20. | 23. |
| 16655 | 17. | 21. | 18. | 14. | 19. | 20. | 18. | 15. | 18. | 19. | 18. | 12. | 20. |
| 16656 | 17. | 18. | 17. | 14. | 18. | 16. | 18. | 14. | 18. | 18. | 14. | 9. | 19. |
| 16657 | 20. | 21. | 19. | 16. | 24. | 26. | 23. | 18. | 23. | 24. | 21. | 15. | 24. |
| 16658 | 14. | 18. | 19. | 16. | 13. | 20. | 19. | 21. | 14. | 18. | 19. | 26. | 14. |
| 16659 | 11. | 13. | 16. | 21. | 16. | 16. | 18. | 19. | 21. | 12. | 16. | 19. | 95.c |
| 16660 | 13. | 18. | 21. | 17. | 16. | 21. | 21. | 18. | 15. | 18. | 20. | 18. | 17. |
| 16661 | 16. | 19. | 17. | 16. | 18. | 26. | 55. | 28. | 23. | 16. | 16. | b | 20. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Value was incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C35 (PAGE 3): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 | 16. | 9. | 14. | 18. | 17. | 15. | 16. | 19. | 14. | 11. | 14. | 19. | 19. |
| 16663 | 20. | 27. | 24. | 24. | 22. | 25. | 27. | 23. | 18. | 24. | 26. | 26. | 20. |
| 16664 | 17. | 19. | 16. | 13. | 19. | 21. | 18. | 13. | 18. | 18. | 19. | 14. | 19. |
| 16665 | 16. | 12. | 17. | 17. | 16. | 15. | 18. | 17. | 20. | 11. | 15. | 19. | 17. |
| 16666 | 16. | 13. | 20. | 20. | 18. | 20. | 20. | 21. | 18. | 9. | 20. | 23. | 22. |
| 16667 | 20. | 16. | 20. | 21. | 21. | 16. | 22. | 18. | 19. | 14. | 21. | 22. | 21. |
| 16668 | 20. | 19. | 19. | 14. | 20. | 22. | 17. | 15. | 17. | 21. | 18. | 14. | 20. |
| 16669 | 13. | 15. | 16. | 18. | 20. | 20. | 16. | 20. | 18. | 17. | 13. | 19. | 22. |
| 16670 | 17. | 15. | 17. | 11. | 18. | 20. | 17. | 15. | 16. | 16. | 18. | 14. | 20. |
| 16671 | 19. | 23. | 24. | 22. | 27. | 27. | 25. | 24. | 21. | 21. | 27. | 22. | 26. |
| 16672 | 17. | 19. | 16. | 16. | 19. | 20. | 14. | 15. | 19. | 15. | 14. | 17. | 20. |
| 16673 | 20. | 23. | 21. | 16. | 22. | 20. | 22. | 14. | 22. | 21. | 20. | 14. | 23. |
| 16674 | 19. | 17. | 13. | 18. | 21. | 23. | 16. | 13. | 18. | 16. | 21. | 20. | 15. |
| 16675 | 20. | 20. | 18. | 16. | 20. | 22. | 20. | 17. | 21. | 21. | 19. | 16. | 21. |
| 16676 | 21. | 21. | 15. | 21. | 22. | 24. | 17. | 21. | 21. | 17. | 14. | 20. | 23. |
| 16677 | 16. | 20. | 19. | 20. | 16. | 23. | 19. | 21. | 18. | 18. | 21. | 21. | 22. |
| 16678 | 11. | 19. | 18. | 16. | 12. | 21. | 20. | 18. | 11. | 15. | 20. | 17. | 17. |
| 16679 | 18. | 19. | 18. | 15. | 18. | 19. | 20. | 15. | 20. | 18. | 21. | 15. | 21. |
| 16680 | 12. | 18. | 20. | 18. | 14. | 20. | 18. | 18. | 45. | b | 17. | 16. | 31. |
| 16681 | 18. | 21. | 18. | 12. | 21. | 25. | 20. | 14. | 21. | 20. | 21. | 13. | 25. |
| 16682 | 16. | 15. | 18. | 13. | 13. | 18. | 19. | 20. | 17. | 12. | 17. | 17. | 19. |
| 16683 | 20. | 16. | 18. | 19. | 22. | 21. | 32. | 23. | 21. | b | 24. | 18. | 58.c |
| 16684 | 17. | 13. | 16. | 18. | 19. | 16. | 19. | 20. | 18. | 11. | 19. | 18. | 20. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Value was incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C35 (PAGE 4): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 | 15. | 17. | 17. | 19. | 12. | 18. | 17. | 17. | 13. | 15. | 19. | 18. | 16. |
| 16686 | 19. | 20. | 20. | 14. | 19. | 21. | 17. | 15. | 19. | 18. | 19. | 18. | 19. |
| 16687 | 16. | 20. | 17. | 13. | 17. | 24. | 19. | 15. | 15. | 16. | 19. | 11. | 19. |
| 16688 | 18. | 19. | 19. | 16. | 19. | 22. | 19. | 18. | 19. | 19. | 19. | 15. | 20. |
| 16689 | 19. | 18. | 16. | 13. | 21. | 22. | 20. | 16. | 19. | 19. | 16. | 11. | 19. |
| 16690 | 20. | 21. | 20. | 15. | 21. | 23. | 21. | 16. | 21. | 20. | 21. | 14. | 23. |
| 16691 | 16. | 17. | 18. | 19. | 16. | 19. | 19. | 17. | 16. | 19. | 17. | 18. | 16. |
| 16692 | 18. | 19. | 17. | 12. | 18. | 24. | 17. | 13. | 19. | 17. | 18. | 16. | 17. |
| 16693 | 22. | 19. | 20. | 18. | 22. | 22. | 21. | 19. | 23. | 17. | 21. | 17. | 21. |
| 16694 | 18. | 18. | 19. | 17. | 15. | 20. | 19. | 18. | 12. | 18. | 22. | 19. | 14. |
| 16695 | 16. | 21. | 17. | 16. | 22. | 23. | 18. | 16. | 23. | 16. | 19. | 17. | 21. |
| 16696 | 20. | 15. | 24. | 22. | 24. | 21. | 19. | 23. | 24. | 25. | 23. | 34. | b |
| 16697 | 19. | 14. | 17. | 19. | 18. | 16. | 17. | 17. | 21. | 15. | 16. | 17. | 20. |
| 16698 | 16. | 20. | 20. | 17. | 18. | 27. | 19. | 17. | 20. | 16. | 19. | 12. | 20. |
| 16699 | 19. | 21. | 18. | 14. | 19. | 21. | 18. | 16. | 19. | 18. | 20. | 16. | 22. |
| 16700 | 20. | 24. | 21. | 20. | 20. | 28. | 24. | 24. | 21. | 20. | 24. | 23. | 20. |
| 16701 | 16. | 20. | 17. | 13. | 19. | 22. | 17. | 14. | 19. | 18. | 17. | 14. | 20. |
| 16702 | 16. | 22. | 18. | 16. | 19. | 21. | 18. | 16. | 19. | 15. | 19. | 13. | 19. |
| 16703 | 16. | 18. | 17. | 15. | 17. | 20. | 17. | 16. | 19. | 17. | 19. | 14. | 20. |
| 16704 | 23. | 23. | 22. | 16. | 23. | 24. | 23. | 17. | 24. | 24. | 25. | 18. | 26. |
| 16705 | 19. | 15. | 21. | 22. | 21. | 19. | 17. | 19. | 21. | 20. | 18. | 14. | 21. |
| 16706 | 18. | 19. | 19. | 13. | 19. | 20. | 21. | 20. | 18. | 19. | 20. | 15. | 22. |
| 16707 | 17. | 20. | 18. | 17. | 21. | 21. | 21. | 17. | 20. | 18. | 20. | 18. | 20. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not recorded.

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TABLE C35 (PAGE 5): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 | 16. | 19. | 14. | 13. | 27. | 10. | 16. | 14. | 15. | 17. | 17. | 14. | 20. |
| 16709 | 15. | 22. | 20. | 17. | 20. | 25. | 19. | 17. | 22. | 21. | 21. | 18. | 22. |
| 16710 | 15. | 21. | 20. | 18. | 17. | 19. | 21. | 20. | 20. | 17. | 20. | 18. | 22. |
| 16711 | 19. | 21. | 13. | 17. | 22. | 19. | 22. | 16. | 22. | 21. | 20. | 13. | 21. |
| 16712 | 21. | 16. | 15. | 19. | 21. | 19. | 16. | 18. | 20. | 19. | 14. | 19. | 22. |
| 16713 | 20. | 23. | 20. | 17. | 21. | 24. | 21. | 16. | 20. | 22. | 19. | 15. | 22. |
| 16714 | 19. | 21. | 19. | 21. | 18. | 19. | 19. | 19. | 21. | 14. | 20. | 19. | 21. |
| 16715 | 17. | 17. | 18. | 21. | 21. | 19. | 20. | 20. | 20. | 11. | 19. | 20. | 20. |
| 16716 | 15. | 15. | 12. | 13. | 17. | 16. | 12. | 14. | 15. | 14. | 13. | 14. | 18. |
| 16717 | 17. | 22. | 24. | 22. | 18. | 25. | 23. | 23. | 16. | 21. | 21. | 24. | 17. |
| 16718 | 18. | 21. | 19. | 13. | 18. | 21. | 20. | 13. | 20. | 17. | 19. | 14. | 21. |
| 16719 | 20. | 17. | 17. | 21. | 23. | 22. | 20. | 21. | 22. | 19. | 19. | 21. | 25. |
| 16720 | 17. | 17. | 12. | 12. | 15. | 18. | 15. | 14. | 15. | 19. | 16. | 13. | 13. |
| 16721 | 17. | 16. | 19. | 17. | 22. | 15. | 22. | 23. | 20. | 10. | 19. | 20. | 17. |
| 16722 | 16. | 13. | 16. | 19. | 17. | 16. | 18. | 18. | 17. | 11. | 16. | 19. | 17. |
| 16723 | 12. | 25. | 15. | 19. | 20. | 20. | 17. | 18. | 20. | 22. | 14. | 19. | 21. |
| 16724 | 14. | 16. | 15. | 18. | 14. | 18. | 17. | 16. | 17. | 17. | 18. | 18. | 18. |
| 16725 | 21. | 20. | 19. | 18. | 22. | 22. | 21. | 17. | 21. | 20. | 17. | 14. | 22. |
| 16726 | 21. | 20. | 15. | 18. | 21. | 21. | 18. | 18. | 23. | 20. | 13. | 18. | 21. |
| 16727 | 14. | 19. | 18. | 18. | 18. | 21. | 19. | 19. | 17. | 16. | 18. | 19. | 19. |
| 16728 | 20. | 23. | 21. | 18. | 20. | 26. | 25. | 20. | 20. | 23. | 19. | 16. | 24. |
| 16729 | 15. | 22. | 22. | 19. | 14. | 24. | 23. | 21. | 15. | 17. | 21. | 19. | 13. |
| 16730 | 19. | 27. | 20. | 24. | 20. | 29. | 22. | 19. | 18. | 13. | 24. | 23. | 26. |

DAYS = DAYS OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

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TABLE C36 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16616 P | 19. | 17. | 15. | 21. | 18. | 19. | 27. | 18. | 22. | 20. | 20. | 22. | 19. |
| 16617 P | 25. | 26. | 23. | 18. | 18. | 23. | 19. | 26. | 21. | 23. | 21. | 25. | 31. |
| 16618 P | 25. | 23. | 24. | 17. | 25. | 23. | 26. | 27. | 26. | 24. | 30. | 31. | 29. |
| 16619 P | 27. | 18. | 26. | 28. | 28. | 22. | 32. | 27. | 26. | 28. | 32. | 30. | 32. |
| 16620 P | 17. | 27. | 23. | 22. | 22. | 21. | 25. | 23. | 23. | 22. | 23. | 24. | 27. |
| 16621 P | 24. | 23. | 25. | 24. | 24. | 24. | 25. | 21. | 25. | 19. | 26. | 24. | 24. |
| 16623 P | 28. | 22. | 26. | 31. | 31. | 26. | 27. | 31. | 30. | 27. | 34. | 29. | 29. |
| 16625 P | 24. | 22. | 24. | 26. | 24. | 22. | 25. | 26. | 25. | 23. | 25. | 24. | 27. |
| 16626 P | 23. | 20. | 23. | 25. | 28. | 22. | 25. | 26. | 27. | 24. | 29. | 27. | 28. |
| 16629 P | 20. | 20. | 21. | 23. | 23. | 25. | 24. | 23. | 25. | 24. | 28. | 29. | 26. |
| 16630 P | 29. | 19. | 25. | 29. | 25. | 24. | 27. | 29. | 29. | 27. | 32. | 28. | 26. |
| 16631 P | 24. | 26. | 28. | 28. | 30. | 30. | 29. | 32. | 29. | 32. | 37. | 36. | 33. |
| 16634 P | 21. | 19. | 22. | 22. | 24. | 16. | 22. | 21. | 20. | 20. | 24. | 22. | 25. |
| 16635 P | 18. | 19. | 22. | 21. | 22. | 24. | 26. | 24. | 25. | 23. | 25. | 23. | 26. |
| 16636 P | 22. | 19. | 23. | 24. | 22. | 22. | 20. | 24. | 22. | 21. | 27. | 21. | 25. |
| 16637 P | 22. | 22. | 21. | 20. | 22. | 19. | 22. | 20. | 23. | 24. | 21. | 28. | 19. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | |
| 16616 P | 20. | 18. | 20. | 23. | 19. | 19. | 27. | 18. | | | | |
| 16617 P | 27. | 26. | 33. | 33. | 35. | 36. | 24. | 16. | | | | |
| 16618 P | 25. | 30. | 32. | 36. | 25. | 29. | 27. | 18. | | | | |
| 16619 P | 33. | 30. | 33. | 30. | 29. | 29. | 25. | 25. | | | | |
| 16620 P | 22. | 23. | 25. | 25. | 30. | 27. | 25. | 20. | | | | |
| 16621 P | 35. | 21. | 24. | 25. | 17. | 23. | 19. | | | | | |
| 16623 P | 27. | 28. | 32. | 34. | 23. | 26. | 25. | 27. | | | | |
| 16625 P | 21. | 27. | 28. | 29. | 23. | 20. | 23. | 22. | | | | |
| 16626 P | 24. | 25. | 30. | 28. | 26. | 27. | 26. | 22. | | | | |
| 16629 P | 28. | 25. | 30. | 32. | 26. | 20. | 18. | 20. | | | | |
| 16630 P | 26. | 23. | 31. | 27. | 22. | 26. | 26. | 25. | | | | |
| 16631 P | 29. | 28. | 25. | 36. | 29. | 18. | 21. | 19. | | | | |
| 16634 P | 23. | 25. | 27. | 27. | 22. | 23. | 24. | | | | | |
| 16635 P | 25. | 22. | 23. | 27. | 29. | 15. | 18. | 17. | | | | |
| 16636 P | 16. | 23. | 27. | 25. | 21. | 20. | 23. | | | | | |
| 16637 P | 30. | 23. | 25. | 31. | 33. | 19. | 24. | 18. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16640 P | 21. | 20. | 18. | 22. | 24. | 21. | 23. | 23. | 25. | 19. | 24. | 24. | 23. |
| 16641 P | 21. | 17. | 19. | 21. | 22. | 17. | 23. | 19. | 21. | 16. | 24. | 20. | 19. |
| 16643 P | 16. | 29. | 21. | 26. | 19. | 24. | 25. | 24. | 23. | 28. | 22. | 25. | 27. |
| 16644 P | 20. | 26. | 25. | 23. | 26. | 25. | 25. | 26. | 23. | 26. | 30. | 28. | 27. |
| 16645 P | 21. | 27. | 22. | 26. | 24. | 23. | 25. | 27. | 23. | 29. | 26. | 28. | 29. |
| 16646 P | 21. | 24. | 21. | 23. | 24. | 22. | 21. | 24. | 24. | 22. | 31. | 23. | 25. |
| 16647 P | 24. | 23. | 21. | 28. | 25. | 25. | 23. | 25. | 25. | 25. | 25. | 23. | 25. |
| 16649 P | 28. | 26. | 26. | 29. | 31. | 32. | 23. | 35. | 29. | 30. | 32. | 35. | 32. |
| 16650 P | 28. | 26. | 24. | 22. | 20. | 21. | 21. | 24. | 21. | 24. | 23. | 33. | 27. |
| 16651 P | 17. | 21. | 22. | 23. | 21. | 25. | 22. | 23. | 19. | 22. | 21. | 20. | 25. |
| 16653 P | 18. | 23. | 24. | 23. | 23. | 25. | 24. | 26. | 25. | 25. | 33. | 28. | 30. |
| 16654 P | 18. | 28. | 23. | 24. | 23. | 26. | 25. | 27. | 24. | 29. | 26. | 26. | 29. |
| 16655 P | 21. | 24. | 22. | 20. | 26. | 26. | 22. | 25. | 23. | 21. | 30. | 24. | 25. |
| 16656 P | 21. | 21. | 22. | 24. | 26. | 24. | 23. | 24. | 25. | 22. | 28. | 22. | 26. |
| 16657 P | 21. | 25. | 25. | 26. | 27. | 31. | 29. | 28. | 30. | 30. | 32. | 30. | 32. |
| 16659 P | 15. | 27. | 24. | 20. | 21. | 23. | 25. | 25. | 22. | 24. | 24. | 24. | 24. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | |
| 16640 P | 22. | 23. | 26. | 27. | 24. | 25. | 25. | 20. | | | | |
| 16641 P | 21. | 20. | 18. | 17. | 22. | 20. | 25. | 21. | | | | |
| 16643 P | 25. | 25. | 27. | 26. | 29. | 30. | 28. | 24. | | | | |
| 16644 P | 24. | 24. | 25. | 29. | 31. | 22. | 20. | 25. | | | | |
| 16645 P | 26. | 29. | 25. | 28. | 28. | 33. | 26. | 20. | 21. | | | |
| 16646 P | 22. | 25. | 24. | 27. | 24. | 21. | 26. | 25. | | | | |
| 16647 P | 22. | 26. | 29. | 29. | 24. | 26. | 19. | | | | | |
| 16649 P | 31. | 31. | 32. | 30. | 30. | 25. | 22. | 28. | | | | |
| 16650 P | 19. | 19. | 21. | 27. | 29. | 28. | 17. | 20. | | | | |
| 16651 P | 22. | 23. | 26. | 24. | 27. | 26. | 18. | 26. | | | | |
| 16653 P | 27. | 27. | 31. | 29. | 30. | 13. | 21. | 22. | | | | |
| 16654 P | 26. | 26. | 26. | 24. | 27. | 30. | 29. | 21. | | | | |
| 16655 P | 23. | 21. | 27. | 27. | 23. | 16. | 22. | 19. | | | | |
| 16656 P | 21. | 24. | 24. | 22. | 23. | 25. | 27. | 26. | | | | |
| 16657 P | 28. | 27. | 29. | 34. | 28. | 23. | 20. | 20. | | | | |
| 16659 P | 26. | 25. | 24. | 22. | 28. | 26. | 26. | 17. | 18. | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 5): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16662 P | 16. | 25. | 20. | 23. | 23. | 22. | 25. | 25. | 20. | 23. | 23. | 25. | 26. |
| 16664 P | 17. | 20. | 18. | 23. | 26. | 24. | 21. | 27. | 27. | 26. | 27. | 27. | 31. |
| 16665 P | 16. | 27. | 21. | 21. | 23. | 23. | 26. | 26. | 22. | 24. | 26. | 24. | 25. |
| 16666 P | 19. | 31. | 23. | 25. | 21. | 24. | 27. | 28. | 22. | 26. | 26. | 26. | 27. |
| 16667 P | 23. | 26. | 26. | 27. | 27. | 29. | 31. | 28. | 28. | 29. | 26. | 28. | 28. |
| 16668 P | a | 22. | 24. | 22. | 25. | 26. | 23. | 25. | 25. | 25. | 28. | 26. | 38. |
| 16669 P | 23. | 23. | 24. | 23. | 20. | 27. | 25. | 25. | 24. | 24. | 26. | 27. | 27. |
| 16670 P | 19. | 22. | 19. | 24. | 27. | 24. | 24. | 21. | 24. | 24. | 28. | 22. | 26. |
| 16673 P | 22. | 24. | 24. | 24. | 26. | 24. | 25. | 23. | 24. | 25. | 26. | 27. | 29. |
| 16675 P | 18. | 21. | 17. | 22. | 21. | 26. | 23. | 25. | 25. | 22. | 26. | 21. | 24. |
| 16676 P | 24. | 25. | 24. | 24. | 24. | 26. | 26. | 25. | 28. | 25. | 26. | 28. | 25. |
| 16678 P | 24. | 21. | 25. | 28. | 24. | 22. | 26. | 25. | 24. | 22. | 22. | 27. | 18. |
| 16679 P | 18. | 22. | 23. | 24. | 25. | 28. | 25. | 26. | 29. | 26. | 27. | 28. | 30. |
| 16680 P | 25. | 22. | 22. | 23. | 23. | 22. | 24. | 22. | 24. | 19. | 21. | 27. | 19. |
| 16681 P | 30. | 28. | 22. | 26. | 23. | 25. | 22. | 26. | 21. | 22. | 27. | 25. | 25. |
| 16683 P | 23. | 23. | 21. | 26. | 26. | 23. | 25. | 26. | 25. | 26. | 30. | 31. | 29. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.

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TABLE C36 (PAGE 6): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | |
| 16662 P | 21. | 27. | 19. | 21. | 25. | 24. | 22. | 16. | | | | |
| 16664 P | 22. | 25. | 27. | 29. | 25. | 23. | 24. | 19. | | | | |
| 16665 P | 22. | 26. | 24. | 26. | 27. | 28. | 24. | 17. | | | | |
| 16666 P | 23. | 27. | 22. | 29. | 27. | 30. | 26. | 22. | | | | |
| 16667 P | 25. | 27. | 24. | 26. | 28. | 26. | 31. | 16. | 13. | | | |
| 16668 P | 24. | 23. | 25. | 22. | 19. | 22. | 20. | 25. | | | | |
| 16669 P | 25. | 23. | 27. | 30. | 29. | 26. | 26. | 27. | | | | |
| 16670 P | 18. | 25. | 31. | 24. | 27. | 20. | 23. | 19. | | | | |
| 16673 P | 24. | 25. | 28. | 22. | 18. | 22. | 20. | 23. | | | | |
| 16675 P | 22. | 20. | 26. | 31. | 27. | 22. | 20. | 15. | | | | |
| 16676 P | 27. | 27. | 26. | 28. | 32. | 28. | 25. | 27. | | | | |
| 16678 P | 22. | 27. | 25. | 23. | 22. | 21. | 24. | | | | | |
| 16679 P | 25. | 22. | 26. | 32. | 27. | 21. | 20. | 23. | | | | |
| 16680 P | 23. | 19. | 23. | 21. | 23. | 20. | 20. | | | | | |
| 16681 P | 19. | 21. | 26. | 31. | 25. | 24. | 18. | 21. | | | | |
| 16683 P | 26. | 32. | 32. | 26. | 33. | 32. | 31. | 27. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 7): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16685 P | 22. | 18. | 23. | 25. | 24. | 16. | 24. | 23. | 22. | 21. | 25. | 29. | 20. |
| 16686 P | 21. | 25. | 23. | 26. | 25. | 26. | 20. | 26. | 27. | 25. | 31. | 24. | 32. |
| 16687 P | 21. | 22. | 24. | 25. | 25. | 29. | 25. | 26. | 25. | 29. | 29. | 27. | 29. |
| 16688 P | 22. | 22. | 21. | 23. | 25. | 23. | 22. | 26. | 26. | 24. | 25. | 27. | 30. |
| 16689 P | 13. | 20. | 22. | 23. | 26. | 28. | 24. | 25. | 25. | 25. | 31. | 25. | 26. |
| 16690 P | 26. | 27. | 24. | 28. | 25. | 24. | 25. | 26. | 29. | 26. | 26. | 23. | 29. |
| 16692 P | 20. | 27. | 25. | 26. | 22. | 27. | 31. | 27. | 22. | 29. | 30. | 28. | 29. |
| 16693 P | 23. | 24. | 20. | 12. | 6. | 75.a | b | 29. | b | 27. | 24. | 27. | 30. |
| 16695 P | 25. | 24. | 21. | 24. | 28. | 21. | 24. | 25. | 23. | 26. | 29. | 27. | 24. |
| 16696 P | 30. | 30. | 29. | 27. | 32. | 33. | 30. | 32. | 32. | 30. | 32. | 37. | 35. |
| 16697 P | 18. | 24. | 18. | 19. | 21. | 23. | 19. | 21. | 23. | 23. | 27. | 25. | 26. |
| 16698 P | 22. | 26. | 22. | 25. | 24. | 26. | 23. | 24. | 25. | 25. | 23. | 21. | 26. |
| 16699 P | 22. | 28. | 25. | 26. | 30. | 30. | 27. | 28. | 27. | 24. | 25. | 26. | 27. |
| 16701 P | 19. | 23. | 23. | 24. | 24. | 24. | 21. | 24. | 26. | 25. | 27. | 28. | 26. |
| 16706 P | 17. | 26. | 19. | 23. | 25. | 25. | 21. | 25. | 23. | 24. | 29. | 26. | 27. |
| 16707 P | 21. | 25. | 20. | 20. | 24. | 24. | 20. | 23. | 22. | 22. | 26. | 23. | 25. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was incorrectly recorded and was excluded from group averages and statistical analyses.
b. Spilled feed precluded the calculation of this value.

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TABLE C36 (PAGE 8): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | |
| 16685 P | 20. | 25. | 27. | 22. | 23. | 24. | 24. | 16. | | | | |
| 16686 P | 29. | 21. | 31. | 34. | 28. | 24. | 24. | 21. | | | | |
| 16687 P | 25. | 23. | 24. | 28. | 25. | 23. | 24. | 21. | | | | |
| 16688 P | 24. | 27. | 29. | 34. | 30. | 26. | 25. | 21. | | | | |
| 16689 P | 25. | 24. | 28. | 33. | 29. | 20. | 22. | 18. | | | | |
| 16690 P | 24. | 28. | 27. | 33. | 29. | 23. | 23. | 19. | | | | |
| 16692 P | 28. | 32. | 24. | 32. | 31. | 35. | 28. | 23. | 22. | | | |
| 16693 P | 23. | 18. | 29. | 34. | 26. | 27. | 22. | 23. | | | | |
| 16695 P | 17. | 21. | 27. | 34. | 28. | 27. | 29. | 27. | | | | |
| 16696 P | 32. | 34. | 32. | 35. | 35. | 28. | 24. | 31. | | | | |
| 16697 P | 21. | 21. | 24. | 31. | 20. | 18. | 23. | 20. | | | | |
| 16698 P | 19. | 21. | 24. | 27. | 27. | 20. | 22. | 21. | | | | |
| 16699 P | 23. | 27. | 27. | 29. | 27. | 21. | 21. | 19. | 12. | | | |
| 16701 P | 22. | 21. | 24. | 31. | 24. | 22. | 23. | 17. | | | | |
| 16706 P | 23. | 23. | 28. | 34. | 28. | 24. | 27. | 26. | | | | |
| 16707 P | 21. | 23. | 22. | 28. | 27. | 20. | 20. | 19. | | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 9): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16708 P | 16. | 19. | 18. | 19. | 22. | 18. | 19. | 22. | 20. | 21. | 24. | 21. | 25. |
| 16709 P | 25. | 23. | 24. | 24. | 25. | 27. | 24. | 27. | 28. | 26. | 30. | 28. | 27. |
| 16711 P | 25. | 26. | 28. | 24. | 31. | 29. | 26. | 28. | 28. | 29. | 30. | 28. | 28. |
| 16712 P | 21. | 23. | 24. | 25. | 24. | 27. | 27. | 28. | 26. | 24. | 27. | 33. | 27. |
| 16713 P | 25. | 25. | 24. | 27. | 27. | 28. | 24. | 26. | 24. | 22. | 28. | 25. | 26. |
| 16715 P | 16. | 28. | 24. | 24. | 21. | 23. | 28. | 26. | 20. | 27. | 26. | 25. | 27. |
| 16716 P | 19. | 20. | 19. | 20. | 19. | 22. | 21. | 20. | 19. | 21. | 23. | 32. | 27. |
| 16717 P | 29. | 24. | 27. | 35. | 28. | 29. | 32. | 27. | 26. | 26. | 31. | 30. | 27. |
| 16718 P | 20. | 22. | 23. | 23. | 25. | 25. | 22. | 24. | 26. | 25. | 29. | 18. | 21. |
| 16719 P | 23. | 22. | 26. | 26. | 25. | 28. | 29. | 26. | 29. | 26. | 28. | 29. | 25. |
| 16722 P | 16. | 25. | 23. | 24. | 20. | 25. | 26. | 25. | 23. | 22. | 24. | 23. | 24. |
| 16723 P | 23. | 23. | 23. | 23. | 24. | 22. | 27. | 21. | 23. | 25. | 24. | 30. | 25. |
| 16724 P | 20. | 20. | 21. | 22. | 21. | 21. | 22. | 22. | 22. | 20. | 24. | 24. | 20. |
| 16725 P | 20. | 23. | 22. | 21. | 26. | 22. | 23. | 25. | 24. | 22. | 29. | 28. | 26. |
| 16728 P | 23. | 22. | 17. | 25. | 24. | 27. | 23. | 24. | 25. | 27. | 27. | 28. | 27. |
| 16730 P | 33. | 33. | 29. | 31. | 33. | 33. | 32. | 35. | 35. | 33. | 26. | 30. | 30. |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C36 (PAGE 10): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | |
| 16708 P | 21. | 19. | 24. | 25. | 22. | 20. | 21. | 19. | | | | |
| 16709 P | 28. | 22. | 25. | 30. | 26. | 23. | 20. | 24. | | | | |
| 16711 P | 26. | 24. | 29. | 33. | 31. | 26. | 26. | 25. | | | | |
| 16712 P | 27. | 27. | 25. | 31. | 29. | 27. | 21. | 24. | | | | |
| 16713 P | 23. | 27. | 26. | 31. | 28. | 22. | 18. | 22. | | | | |
| 16715 P | 21. | 27. | 22. | 24. | 24. | 31. | 26. | 20. | | | | |
| 16716 P | 21. | 23. | 23. | 23. | 26. | 22. | 19. | 15. | | | | |
| 16717 P | 22. | 27. | 33. | 30. | 23. | 23. | 25. | 23. | | | | |
| 16718 P | 19. | 17. | 23. | 28. | 24. | 21. | 20. | 7. | | | | |
| 16719 P | 22. | 25. | 24. | 24. | 24. | 24. | 17. | 19. | | | | |
| 16722 P | 19. | 22. | 19. | 23. | 24. | 27. | 26. | 20. | | | | |
| 16723 P | 26. | 23. | 26. | 25. | 31. | 24. | 19. | 20. | | | | |
| 16724 P | 20. | 20. | 25. | 22. | 19. | 27. | 22. | | | | | |
| 16725 P | 26. | 27. | 28. | 31. | 28. | 18. | 23. | 23. | | | | |
| 16728 P | 23. | 24. | 25. | 27. | 26. | 24. | 22. | 22. | | | | |
| 16730 P | 29. | 18. | 24. | 28. | 29. | 23. | 23. | 32. | 27. | | | |

P = PREGNANT
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE C37 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | |
| 16616 | 21. | 23. | 33. | 35. | 73.a | 40. | 50. | 48. | 56. |
| 16617 | 20. | 31. | 67. | 59. | 46. | 34. | 43. | 38. | 57. |
| 16618 | 29. | 45. | 54. | 66. | 51. | 41. | 54. | 63. | 69. |
| 16619 | 21. | 30. | 33. | 59. | 47. | 41. | 42. | 39. | 49. |
| 16620 | 25. | 16. | 68. | 48. | 45. | 46. | 48. | 49. | 55. |
| 16621 | 24. | 24. | 37. | 37. | 28. | 37. | 42. | 45. | 33. |
| 16623 | 22. | 31. | 34. | 40. | 47. | 41. | 43. | 54. | 52. |
| 16625 | 22. | 35. | 33. | 47. | 41. | 37. | 47. | 32. | 49. |
| 16626 | 18. | 28. | 36. | 47. | 45. | 50. | 48. | 48. | 52. |
| 16629 | 23. | 21. | 40. | 39. | 46. | 37. | 48. | 47. | 50. |
| 16630 | 26. | 41. | 44. | 30. | 48. | 50. | 52. | 53. | 54. |
| 16631 | 24. | 26. | 30. | 37. | 44. | 46. | 45. | 55. | 52. |
| 16634 | 20. | 35. | 38. | 46. | 37. | 49. | 51. | 55. | 48. |
| 16635 | 21. | 22. | 35. | 38. | 45. | 41. | 47. | 53. | 4. |
| 16636 | 23. | 24. | 42. | 41. | 50. | 40. | 50. | 54. | 46. |
| 16637 | 23. | 31. | 41. | 26. | 37. | 37. | 53. | 50. | 39. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C37 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | |
| 16640 | 18. | 30. | 35. | 40. | 46. | 44. | 47. | 49. | 55. |
| 16641 | 16. | 27. | 28. | 36. | 35. | 43. | 40. | 42. | 50. |
| 16643 | 24. | 31. | 59. | 53. | 47. | 47. | 39. | 42. | 43. |
| 16644 | 19. | 31. | 37. | 45. | 26. | 38. | 36. | 49. | 46. |
| 16645 | 27. | 51. | a | b | 49. | b | 123.c | 49. | 74.c |
| 16646 | 20. | 19. | 29. | 30. | 39. | 37. | 38. | 50. | b |
| 16647 | 21. | 54. | 28. | 34. | 45. | 39. | 47. | 51. | 45. |
| 16649 | 25. | 29. | 36. | 34. | 39. | 39. | 39. | 49. | 46. |
| 16650 | 24. | 31. | 30. | 43. | 40. | 44. | 39. | 50. | 50. |
| 16651 | 21. | 27. | 27. | 58. | 41. | 45. | 47. | 45. | 44. |
| 16653 | 25. | 31. | 45. | 47. | 49. | 44. | 46. | 54. | 54. |
| 16654 | 21. | 31. | 47. | 34. | 39. | 27. | 36. | 37. | 39. |
| 16655 | 23. | 26. | 40. | 42. | 42. | 37. | 43. | 52. | 22. |
| 16656 | 22. | 26. | 35. | 41. | 41. | 34. | 44. | 50. | 49. |
| 16657 | 25. | 29. | 43. | 56. | 42. | 41. | 49. | 50. | 54. |
| 16659 | 16. | 24. | 74.c | b | 35. | 62. | 38. | 43. | 48. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.
b. Spilled feed precluded the calculation of this value.
c. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C37 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | |
| 16662 | 17. | 21. | 36. | 55. | 36. | a | 102.b | a | 46. |
| 16664 | 18. | 17. | 26. | 24. | 30. | 31. | 32. | 40. | 45. |
| 16665 | 10. | 21. | 25. | 21. | 25. | 41. | 39. | 47. | 42. |
| 16666 | 27. | 31. | 35. | 39. | 58. | 44. | 46. | 51. | 53. |
| 16667 | 13. | 18. | 23. | 31. | 33. | 32. | 37. | 43. | 43. |
| 16668 | 38. | 32. | 41. | 37. | 44. | 44. | 43. | 46. | 50. |
| 16669 | 23. | 36. | 39. | 49. | 49. | 43. | 45. | 53. | 56. |
| 16670 | 26. | 28. | 42. | 33. | 26. | 28. | 35. | 44. | 37. |
| 16673 | 16. | 28. | 35. | 35. | 41. | 39. | 41. | 47. | 53. |
| 16675 | 16. | 20. | 33. | 33. | 45. | 43. | 42. | 53. | 55. |
| 16676 | 26. | 63. | 40. | 58. | a | 62. | 40. | 52. | 62. |
| 16678 | 19. | 25. | 39. | 39. | 44. | 33. | 39. | 47. | 35. |
| 16679 | 19. | 22. | 41. | 37. | 40. | 38. | 44. | 54. | 43. |
| 16680 | 17. | 22. | 36. | 38. | 55. | 31. | 36. | 50. | 65. |
| 16681 | 41. | 43. | 45. | 32. | 36. | 34. | 38. | 44. | 45. |
| 16683 | 23. | 59. | c | a | 33. | 37. | 131.b | 50. | 92.b |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.
b. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.
c. Value was not recorded.

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TABLE C37 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | |
| 16685 | 17. | 32. | 38. | 42. | 41. | 42. | 54. | 49. | 50. |
| 16686 | 17. | 27. | 41. | 47. | 49. | 50. | 46. | 51. | 62. |
| 16687 | 18. | 21. | 29. | 31. | 51. | 37. | 38. | 48. | 46. |
| 16688 | 21. | 25. | 28. | 46. | 44. | 46. | 32. | 53. | 47. |
| 16689 | 18. | 29. | 42. | 49. | 45. | 38. | 48. | 49. | 33. |
| 16690 | 20. | 23. | 32. | 30. | 35. | 34. | 30. | 45. | 44. |
| 16692 | 13. | 21. | 28. | 27. | 39. | 36. | 42. | 44. | 44. |
| 16693 | 26. | 33. | 38. | 43. | 43. | 42. | 43. | 51. | 45. |
| 16695 | 34. | 37. | 130.b | 42. | 34. | 49. | 87.b | 61. | 49. |
| 16696 | 24. | 26. | 31. | 29. | 35. | 28. | 38. | 43. | 67. |
| 16697 | 16. | 21. | 32. | 41. | 42. | 38. | 38. | 49. | 47. |
| 16698 | 27. | 31. | 42. | 45. | 47. | 42. | 40. | 49. | 46. |
| 16699 | 26. | 37. | 39. | 48. | 41. | 51. | 47. | 49. | 58. |
| 16701 | 20. | 33. | 48. | 63. | 69. | 40. | 48. | 51. | 43. |
| 16706 | 28. | 29. | 37. | a | 42. | 35. | 47. | 51. | 46. |
| 16707 | 29. | 30. | 36. | 37. | 33. | 41. | 35. | 44. | 33. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.
b. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

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TABLE C37 (PAGE 5): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART B

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | |
| 16708 | 21. | 21. | 22. | 25. | 34. | 35. | 40. | 40. | 43. |
| 16709 | 21. | 30. | 37. | 45. | 37. | 36. | 44. | 39. | 54. |
| 16711 | 22. | 28. | 34. | 36. | 38. | 56. | 45. | 49. | 51. |
| 16712 | 25. | 27. | 30. | 47. | 38. | 42. | 48. | 48. | 57. |
| 16713 | 12. | 22. | 22. | 29. | 34. | 37. | 39. | 42. | 47. |
| 16715 | 21. | 29. | 37. | 41. | 44. | 38. | 48. | 42. | 46. |
| 16716 | 26. | 37. | 43. | 44. | 36. | 38. | 38. | 46. | 51. |
| 16717 | 19. | 30. | 39. | 47. | 43. | 34. | 47. | 51. | 46. |
| 16718 | 17. | 26. | 24. | 28. | 41. | 40. | 40. | 39. | 41. |
| 16719 | 15. | 24. | 27. | 31. | 33. | 38. | 35. | 45. | 49. |
| 16722 | 16. | 24. | 26. | 51. | 41. | 41. | 49. | 51. | 53. |
| 16723 | 23. | 29. | 31. | 42. | 38. | 48. | 49. | 54. | 58. |
| 16724 | 21. | 22. | 32. | 42. | 47. | 33. | 42. | 47. | 42. |
| 16725 | 27. | 27. | 43. | 41. | 49. | 39. | 41. | 53. | 55. |
| 16728 | 14. | 27. | 32. | 37. | 42. | 36. | 44. | 46. | 49. |
| 16730 | 31. | 39. | 40. | 37. | 45. | 42. | 70. | 33. | a |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE C38 (PAGE 1): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART B

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 10 M | 10 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16616 | 23 | 14 | 0 | 14 | 5 | 9 | 5 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16617 | 23 | 19 | 0 | 19 | 9 | 10 | 9 | 9 | 4 | 4 | 3 | 4 | 3 | 4 | 20 |
| 16618 | 22 | 22 | 0 | 22 | 15 | 7 | 15 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 22 |
| 16619 | 23 | 14 | 0 | 14 | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16620 | 23 | 13 | 0 | 13 | 3 | 10 | 3 | 10 | 2 | 6 | 2 | 6 | 2 | 6 | 15 |
| 16621 | 22 | 15 | 0 | 15 | 5 | 10 | 5 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16623 | 23 | 17 | 0 | 17 | 10 | 7 | 10 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16625 | 22 | 16 | 0 | 16 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16626 | 23 | 16 | 0 | 16 | 6 | 10 | 6 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16629 | 22 | 17 | 0 | 17 | 8 | 9 | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16630 | 22 | 13 | 0 | 13 | 6 | 7 | 6 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 13 |
| 16631 | 23 | 17 | 0 | 17 | 6 | 11 | 6 | 11 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16634 | 23 | 14 | 0 | 14 | 10 | 4 | 10 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 14 |
| 16635 | 23 | 11 | 1 | 12 | 4 | 7 | 4 | 7 | 3 | 5 | 3 | 5 | 3 | 5 | 13 |
| 16636 | 22 | 16 | 0 | 16 | 10 | 6 | 10 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16637 | 22 | 16 | 0 | 16 | 9 | 7 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |

M = MALE F = FEMALE
a. Number of live pups preculling.
b. Number of live pups postculling.

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TABLE C38 (PAGE 2): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART B

DOSAGE GROUP II 0.01 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 10 M | 10 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16640 | 23 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16641 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16643 | 23 | 12 | 0 | 12 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 13 |
| 16644 | 22 | 18 | 1 | 19 | 10 | 8 | 10 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16645 | 23 | 14 | 0 | 14 | 8 | 6 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16646 | 23 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16647 | 22 | 14 | 0 | 14 | 6 | 8 | 5 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16649 | 22 | 17 | 0 | 17 | 9 | 8 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16650 | 23 | 18 | 0 | 18 | 9 | 9 | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16651 | 23 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16653 | 23 | 12 | 0 | 12 | 5 | 7 | 5 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16654 | 22 | 16 | 0 | 16 | 11 | 5 | 11 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16655 | 23 | 16 | 0 | 16 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16656 | 23 | 13 | 0 | 13 | 4 | 9 | 4 | 9 | 3 | 5 | 3 | 5 | 3 | 5 | 14 |
| 16657 | 22 | 17 | 0 | 17 | 11 | 6 | 11 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16659 | 23 | 13 | 0 | 13 | 4 | 9 | 4 | 9 | 3 | 5 | 3 | 5 | 3 | 5 | 14 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
a. Number of live pups preculling.
b. Number of live pups postculling.

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TABLE C38 (PAGE 3): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART B

DOSAGE GROUP III 0.1 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 10 M | 10 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16662 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16664 | 23 | 15 | 0 | 15 | 10 | 5 | 10 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16665 | 22 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16666 | 22 | 15 | 0 | 16[1] | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16667 | 23 | 14 | 0 | 14 | 3 | 11 | 3 | 11 | 2 | 6 | 2 | 6 | 2 | 6 | 16 |
| 16668 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16669 | 23 | 17 | 0 | 17 | 8 | 9 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16670 | 23 | 14 | 0 | 14 | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16673 | 22 | 15 | 0 | 15 | 11 | 4 | 11 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 17 |
| 16675 | 23 | 14 | 1 | 15 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16676 | 23 | 18(1) | 0 | 18 | 11 | 6 | 11 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16678 | 22 | 15(1) | 0 | 15 | 5 | 9 | 5 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16679 | 23 | 15 | 0 | 15 | 9 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16680 | 22 | 14 | 1 | 15 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16681 | 23 | 16(1) | 0 | 16 | 6 | 9 | 5 | 6 | 4 | 4 | 3 | 4 | 3 | 4 | 18 |
| 16683 | 23 | 16 | 0 | 16 | 8 | 8 | 5 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | c |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
[ ] = Number of pups in which cannibalization and/or autolysis precluded the determination of viability.
a. Number of live pups preculling.
b. Number of live pups postculling.
c. Value was not recorded.

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TABLE C38 (PAGE 4): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART B

DOSAGE GROUP IV 1.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 10 M | 10 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16685 | 23 | 14 | 0 | 14 | 8 | 6 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16686 | 23 | 18 | 0 | 18 | 10 | 8 | 10 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 20 |
| 16687 | 23 | 13 | 0 | 13 | 9 | 4 | 9 | 3 | 6 | 2 | 6 | 2 | 6 | 2 | 16 |
| 16688 | 22 | 18 | 0 | 18 | 9 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16689 | 23 | 17 | 0 | 17 | 5 | 12 | 5 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16690 | 23 | 19 | 0 | 19 | 10 | 9 | 10 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16692 | 23 | 10 | 0 | 10 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 10 |
| 16693 | 23 | 13 | 0 | 13 | 8 | 5 | 8 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16695 | 22 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16696 | 23 | 15 | 0 | 15 | 6 | 9 | 6 | 8 | 4 | 4 | 4 | 3 | 4 | 3 | 17 |
| 16697 | 23 | 13 | 0 | 13 | 11 | 2 | 11 | 2 | 7 | 1 | 7 | 1 | 7 | 1 | 17 |
| 16698 | 23 | 18(1) | 0 | 18 | 10 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16699 | 23 | 19(2) | 0 | 19 | 5 | 12 | 5 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16701 | 23 | 15 | 0 | 15 | 5 | 10 | 5 | 10 | 3 | 5 | 3 | 5 | 3 | 5 | 18 |
| 16706 | 23 | 16 | 0 | 16 | 9 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16707 | 23 | 13 | 0 | 13 | 5 | 8 | 5 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
a. Number of live pups preculling.
b. Number of live pups postculling.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C38 (PAGE 5): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART B

DOSAGE GROUP V 30.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 10 M | 10 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16708 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16709 | 23 | 16 | 0 | 16 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16711 | 22 | 17 | 0 | 17 | 12 | 5 | 12 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 18 |
| 16712 | 23 | 12 | 0 | 12 | 8 | 4 | 8 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 16 |
| 16713 | 22 | 12 | 0 | 12 | 5 | 7 | 5 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 13 |
| 16715 | 23 | 14 | 0 | 14 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | c |
| 16716 | 22 | 16 | 0 | 16 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16717 | 23 | 19 | 0 | 19 | 10 | 9 | 10 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 20 |
| 16718 | 22 | 15 | 1 | 16 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16719 | 23 | 14 | 0 | 14 | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16722 | 23 | 14 | 0 | 14 | 9 | 5 | 9 | 4 | 5 | 3 | 5 | 3 | 5 | 3 | 14 |
| 16723 | 23 | 13 | 0 | 13 | 7 | 6 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16724 | 22 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16725 | 23 | 15 | 2 | 17 | 10 | 5 | 10 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16728 | 22 | 16 | 0 | 16 | 5 | 11 | 5 | 11 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16730 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |

a. Number of live pups preculling.
b. Number of live pups postculling.
c. Value was incorrectly recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C39 (PAGE 1): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART B

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16616 | 6.9 | 6.6 | 6.7 | 9.4 | 9.3 | 9.3 | 9.2 | 9.7 | 9.5 | 15.6 | 16.6 | 16.1 | 20.1 | 21.0 | 20.6 |
| 16617 | 6.2 | 5.6 | 5.9 | 9.0 | 8.2 | 8.6 | 9.0 | 8.6 | 8.8 | 15.5 | 13.8 | 14.5 | 19.4 | 17.9 | 18.6 |
| 16618 | 5.8 | 5.4 | 5.7 | 8.5 | 8.4 | 8.4 | 9.2 | 8.3 | 8.8 | 15.4 | 14.6 | 15.0 | 20.2 | 19.2 | 19.6 |
| 16619 | 6.7 | 6.3 | 6.6 | 10.3 | 9.8 | 10.1 | 10.6 | 9.9 | 10.3 | 17.0 | 16.1 | 16.6 | 21.2 | 20.2 | 20.7 |
| 16620 | 6.7 | 6.1 | 6.2 | 9.2 | 9.0 | 9.0 | 9.2 | 8.7 | 8.9 | 15.7 | 15.1 | 15.3 | 20.0 | 19.0 | 19.2 |
| 16621 | 5.2 | 4.9 | 5.0 | 8.0 | 7.9 | 8.0 | 8.2 | 8.2 | 8.2 | 13.9 | 13.4 | 13.6 | 17.7 | 17.7 | 17.7 |
| 16623 | 6.6 | 6.1 | 6.4 | 10.1 | 9.4 | 9.8 | 9.9 | 9.6 | 9.8 | 16.6 | 16.7 | 16.6 | 21.2 | 21.2 | 21.2 |
| 16625 | 6.1 | 5.6 | 5.9 | 9.2 | 8.5 | 8.8 | 9.2 | 8.6 | 8.9 | 15.3 | 14.4 | 14.8 | 19.7 | 18.8 | 19.2 |
| 16626 | 7.0 | 6.6 | 6.7 | 9.9 | 9.2 | 9.5 | 10.0 | 9.1 | 9.6 | 16.8 | 16.0 | 16.4 | 21.2 | 19.7 | 20.4 |
| 16629 | 6.3 | 6.1 | 6.2 | 8.8 | 8.4 | 8.6 | 8.6 | 8.6 | 8.6 | 15.2 | 15.2 | 15.2 | 19.0 | 19.0 | 19.0 |
| 16630 | 6.5 | 6.0 | 6.2 | 10.8 | 9.9 | 10.3 | 10.6 | 10.0 | 10.4 | 18.0 | 16.9 | 17.5 | 23.0 | 21.5 | 22.3 |
| 16631 | 6.6 | 6.5 | 6.6 | 9.7 | 9.8 | 9.8 | 10.0 | 9.6 | 9.8 | 17.9 | 18.0 | 17.9 | 21.9 | 22.4 | 22.2 |
| 16634 | 6.3 | 6.0 | 6.2 | 9.4 | 9.0 | 9.3 | 9.5 | 8.8 | 9.2 | 16.2 | 15.6 | 15.9 | 20.6 | 19.9 | 20.3 |
| 16635 | 6.9 | 6.4 | 6.6 | 11.6 | 10.8 | 11.1 | 11.8 | 11.0 | 11.3 | 18.8 | 17.9 | 18.3 | 23.6 | 22.7 | 23.0 |
| 16636 | 5.5 | 5.3 | 5.4 | 8.1 | 8.1 | 8.1 | 8.4 | 8.0 | 8.2 | 14.4 | 13.5 | 14.0 | 18.4 | 17.2 | 17.8 |
| 16637 | 6.1 | 5.7 | 6.0 | 6.9 | 6.2 | 6.6 | 7.2 | 6.9 | 7.0 | 11.0 | 10.9 | 11.0 | 12.6 | 12.8 | 12.7 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE C39 (PAGE 2): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART B

DOSAGE GROUP II 0.01 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16640 | 6.4 | 6.1 | 6.2 | 9.3 | 8.9 | 9.1 | 9.4 | 8.8 | 9.1 | 15.6 | 14.8 | 15.2 | 18.9 | 18.2 | 18.5 |
| 16641 | 6.8 | 6.6 | 6.7 | 9.9 | 9.7 | 9.8 | 9.8 | 9.9 | 9.8 | 16.1 | 16.2 | 16.2 | 20.7 | 21.0 | 20.8 |
| 16643 | 7.0 | 6.7 | 6.8 | 9.6 | 9.0 | 9.3 | 9.8 | 8.9 | 9.4 | 15.5 | 10.7 | 13.1 | 19.4 | 12.6 | 16.0 |
| 16644 | 5.7 | 5.1 | 5.4 | 8.4 | 7.8 | 8.2 | 8.0 | 8.2 | 8.0 | 11.0 | 10.6 | 10.8 | 14.7 | 13.6 | 14.2 |
| 16645 | 7.1 | 6.8 | 7.0 | 9.8 | 9.2 | 9.6 | 9.9 | 9.5 | 9.7 | 15.9 | 15.2 | 15.6 | 20.0 | 18.9 | 19.4 |
| 16646 | 6.7 | 6.2 | 6.4 | 9.4 | 8.7 | 9.0 | 9.6 | 9.0 | 9.3 | 16.3 | 14.9 | 15.6 | 20.2 | 18.8 | 19.5 |
| 16647 | 5.7 | 5.4 | 5.5 | 8.6 | 8.4 | 8.5 | 8.6 | 8.0 | 8.3 | 14.5 | 14.7 | 14.6 | 18.6 | 19.0 | 18.8 |
| 16649 | 5.8 | 5.4 | 5.6 | 6.9 | 7.2 | 7.0 | 7.8 | 7.3 | 7.6 | 12.8 | 12.0 | 12.4 | 16.8 | 15.9 | 16.4 |
| 16650 | 6.2 | 5.8 | 6.0 | 9.1 | 8.4 | 8.8 | 9.2 | 8.3 | 8.8 | 16.1 | 14.5 | 15.3 | 23.2 | 18.6 | 20.9 |
| 16651 | 6.6 | 6.2 | 6.4 | 9.6 | 8.9 | 9.2 | 9.6 | 8.6 | 9.1 | 15.2 | 13.7 | 14.4 | 19.1 | 17.3 | 18.2 |
| 16653 | 6.9 | 6.4 | 6.6 | 10.0 | 9.4 | 9.7 | 10.1 | 9.6 | 9.9 | 16.8 | 15.2 | 16.0 | 20.8 | 19.1 | 19.9 |
| 16654 | 6.1 | 6.2 | 6.1 | 8.9 | 9.1 | 9.0 | 8.4 | 9.0 | 8.7 | 9.7 | 11.3 | 10.5 | 12.4 | 14.6 | 13.5 |
| 16655 | 6.5 | 6.2 | 6.4 | 9.7 | 9.2 | 9.4 | 9.8 | 9.4 | 9.6 | 15.7 | 15.2 | 15.5 | 19.8 | 19.2 | 19.4 |
| 16656 | 6.6 | 6.2 | 6.3 | 9.2 | 9.0 | 9.1 | 9.5 | 9.2 | 9.3 | 14.1 | 14.8 | 14.5 | 18.2 | 18.9 | 18.6 |
| 16657 | 6.2 | 5.8 | 6.0 | 8.8 | 8.6 | 8.7 | 9.0 | 9.1 | 9.0 | 15.0 | 15.8 | 15.4 | 19.6 | 20.2 | 19.9 |
| 16659 | 7.2 | 6.4 | 6.7 | 10.1 | 8.9 | 9.3 | 9.8 | 8.2 | 8.8 | 10.6 | 11.1 | 10.9 | 13.9 | 14.1 | 14.0 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE C39 (PAGE 3): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART B

DOSAGE GROUP III 0.1 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16662 | 6.4 | 6.0 | 6.2 | 9.5 | 9.0 | 9.2 | 9.6 | 9.0 | 9.3 | 16.0 | 14.5 | 15.2 | 20.0 | 18.4 | 19.2 |
| 16664 | 6.5 | 6.0 | 6.3 | 8.0 | 7.2 | 7.7 | 7.6 | 7.2 | 7.4 | 12.5 | 11.7 | 12.1 | 15.2 | 14.6 | 14.9 |
| 16665 | 5.7 | 5.5 | 5.6 | 8.0 | 7.4 | 7.8 | 8.1 | 7.3 | 7.7 | 14.0 | 12.4 | 13.2 | 16.4 | 14.8 | 15.6 |
| 16666 | 6.2 | 6.0 | 6.1 | 9.0 | 8.7 | 8.9 | 9.4 | 8.9 | 9.2 | 15.1 | 16.5 | 15.8 | 18.7 | 20.8 | 19.7 |
| 16667 | 6.6 | 6.3 | 6.4 | 9.0 | 8.8 | 8.8 | 8.9 | 8.8 | 8.8 | 14.6 | 14.6 | 14.6 | 18.3 | 18.2 | 18.2 |
| 16668 | 7.0 | 6.8 | 6.8 | 10.7 | 10.0 | 10.3 | 10.8 | 10.3 | 10.5 | 16.7 | 16.5 | 16.6 | 20.8 | 20.5 | 20.7 |
| 16669 | 6.5 | 5.7 | 6.1 | 8.7 | 8.6 | 8.6 | 8.3 | 8.8 | 8.6 | 13.7 | 15.4 | 14.6 | 17.9 | 19.8 | 18.8 |
| 16670 | 6.5 | 6.2 | 6.4 | 8.3 | 8.1 | 8.2 | 7.7 | 8.2 | 8.0 | 9.7 | 10.1 | 9.9 | 13.1 | 13.7 | 13.4 |
| 16673 | 6.0 | 5.6 | 5.9 | 8.5 | 7.9 | 8.3 | 8.5 | 7.7 | 8.2 | 13.5 | 12.3 | 13.0 | 17.5 | 16.0 | 17.0 |
| 16675 | 6.6 | 6.0 | 6.3 | 8.8 | 8.0 | 8.3 | 8.7 | 8.2 | 8.4 | 13.8 | 13.5 | 13.6 | 18.1 | 17.8 | 18.0 |
| 16676 | 6.2 | 5.9 | 6.1 | 9.2 | 8.5 | 9.0 | 9.1 | 8.6 | 8.8 | 15.3 | 12.4 | 13.9 | 19.9 | 16.2 | 18.0 |
| 16678 | 6.0 | 5.8 | 5.9 | 9.3 | 9.1 | 9.2 | 9.2 | 9.0 | 9.1 | 12.6 | 12.6 | 12.6 | 16.4 | 16.4 | 16.4 |
| 16679 | 7.1 | 6.6 | 6.9 | 10.6 | 10.1 | 10.4 | 10.8 | 10.0 | 10.4 | 16.4 | 17.2 | 16.8 | 20.8 | 21.4 | 21.1 |
| 16680 | 6.0 | 5.8 | 5.9 | 8.1 | 8.3 | 8.2 | 8.0 | 8.2 | 8.2 | 13.1 | 14.0 | 13.6 | 16.7 | 17.7 | 17.2 |
| 16681 | 6.0 | 5.8 | 5.9 | 6.9 | 7.0 | 7.0 | 7.0 | 7.6 | 7.3 | 11.1 | 12.1 | 11.7 | 13.6 | 15.5 | 14.7 |
| 16683 | 6.5 | 6.2 | 6.4 | 7.2 | 7.6 | 7.5 | 7.1 | 7.1 | 7.1 | 11.1 | 11.3 | 11.2 | 14.8 | 14.6 | 14.7 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE C39 (PAGE 4): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART B

DOSAGE GROUP IV 1.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16685 | 6.8 | 6.2 | 6.5 | 10.6 | 9.5 | 10.1 | 10.4 | 9.2 | 9.8 | 18.0 | 15.3 | 16.6 | 22.7 | 19.8 | 21.2 |
| 16686 | 6.8 | 6.4 | 6.6 | 8.7 | 8.1 | 8.4 | 9.0 | 8.6 | 8.8 | 16.1 | 15.1 | 15.6 | 20.4 | 19.2 | 19.8 |
| 16687 | 6.8 | 6.4 | 6.7 | 11.2 | 10.8 | 11.1 | 11.0 | 10.6 | 10.9 | 17.4 | 16.6 | 17.2 | 21.8 | 21.0 | 21.6 |
| 16688 | 5.3 | 5.3 | 5.3 | 7.9 | 7.7 | 7.8 | 7.0 | 7.3 | 7.2 | 12.9 | 13.2 | 13.1 | 17.6 | 17.0 | 17.3 |
| 16689 | 6.4 | 6.2 | 6.2 | 9.1 | 9.4 | 9.3 | 9.2 | 9.0 | 9.1 | 15.4 | 14.6 | 15.0 | 19.0 | 18.2 | 18.6 |
| 16690 | 6.2 | 5.8 | 6.0 | 7.9 | 7.6 | 7.8 | 8.0 | 7.5 | 7.7 | 12.9 | 12.5 | 12.7 | 16.3 | 15.5 | 15.9 |
| 16692 | 7.0 | 6.3 | 6.6 | 10.6 | 9.1 | 9.9 | 10.8 | 8.7 | 9.8 | 16.6 | 13.2 | 14.9 | 21.1 | 16.6 | 18.9 |
| 16693 | 6.3 | 6.2 | 6.3 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 16.2 | 15.8 | 16.0 | 20.8 | 20.6 | 20.7 |
| 16695 | 6.6 | 6.1 | 6.4 | 10.0 | 9.4 | 9.7 | 9.7 | 9.4 | 9.6 | 15.8 | 15.5 | 15.6 | 20.5 | 19.8 | 20.2 |
| 16696 | 6.4 | 5.7 | 6.0 | 8.6 | 7.7 | 8.1 | 7.9 | 7.3 | 7.6 | 12.2 | 13.6 | 12.8 | 15.2 | 18.0 | 16.4 |
| 16697 | 6.8 | 6.6 | 6.8 | 11.0 | 11.2 | 11.0 | 10.9 | 11.6 | 11.0 | 18.1 | 19.0 | 18.2 | 22.4 | 23.0 | 22.5 |
| 16698 | 5.8 | 5.7 | 5.7 | 8.6 | 7.9 | 8.3 | 8.8 | 7.8 | 8.3 | 14.7 | 13.6 | 14.1 | 19.1 | 17.6 | 18.4 |
| 16699 | 6.3 | 5.8 | 6.0 | 9.2 | 9.2 | 9.2 | 9.2 | 9.6 | 9.4 | 16.3 | 16.4 | 16.4 | 20.8 | 20.8 | 20.8 |
| 16701 | 6.4 | 6.4 | 6.4 | 8.5 | 8.3 | 8.4 | 8.5 | 8.3 | 8.4 | 14.7 | 14.1 | 14.3 | 18.5 | 18.0 | 18.2 |
| 16706 | 6.7 | 6.2 | 6.5 | 9.9 | 8.2 | 9.2 | 9.8 | 7.6 | 8.7 | 17.3 | 9.6 | 13.5 | 21.8 | 12.7 | 17.3 |
| 16707 | 6.3 | 6.4 | 6.3 | 9.1 | 9.4 | 9.2 | 9.0 | 9.5 | 9.2 | 12.2 | 13.5 | 12.9 | 15.2 | 16.5 | 15.8 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C39 (PAGE 5): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART B

DOSAGE GROUP V 30.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16708 | 6.5 | 5.8 | 6.1 | 8.6 | 8.0 | 8.3 | 8.7 | 8.2 | 8.5 | 13.8 | 13.3 | 13.6 | 18.0 | 17.3 | 17.6 |
| 16709 | 6.0 | 5.7 | 5.9 | 7.5 | 7.8 | 7.6 | 7.6 | 8.7 | 8.2 | 11.8 | 14.8 | 13.3 | 14.9 | 19.4 | 17.1 |
| 16711 | 5.4 | 5.1 | 5.3 | 7.4 | 7.0 | 7.3 | 7.3 | 6.9 | 7.2 | 13.0 | 12.6 | 12.8 | 17.6 | 16.6 | 17.2 |
| 16712 | 6.6 | 6.5 | 6.6 | 10.3 | 10.1 | 10.2 | 10.4 | 10.1 | 10.3 | 15.7 | 16.4 | 16.0 | 20.2 | 21.1 | 20.6 |
| 16713 | 5.9 | 5.8 | 5.8 | 9.1 | 9.1 | 9.1 | 9.1 | 9.0 | 9.1 | 14.9 | 15.4 | 15.1 | 19.2 | 19.7 | 19.4 |
| 16715 | 6.5 | 6.4 | 6.4 | 10.0 | 9.4 | 9.7 | 9.8 | 9.5 | 9.7 | 16.2 | 15.6 | 15.9 | 19.2 | 19.2 | 19.2 |
| 16716 | 5.6 | 5.4 | 5.5 | 8.3 | 8.0 | 8.1 | 8.2 | 8.1 | 8.2 | 13.7 | 13.5 | 13.6 | 17.4 | 17.3 | 17.4 |
| 16717 | 6.5 | 6.2 | 6.4 | 9.3 | 8.8 | 9.0 | 8.8 | 8.6 | 8.7 | 14.7 | 15.2 | 15.0 | 18.6 | 18.4 | 18.5 |
| 16718 | 5.4 | 5.2 | 5.3 | 7.8 | 7.0 | 7.4 | 8.0 | 6.9 | 7.4 | 13.5 | 11.0 | 12.2 | 17.8 | 14.1 | 15.9 |
| 16719 | 7.2 | 6.6 | 7.0 | 9.8 | 9.2 | 9.6 | 9.7 | 9.1 | 9.4 | 15.8 | 14.6 | 15.2 | 19.9 | 18.4 | 19.1 |
| 16722 | 6.8 | 6.3 | 6.6 | 9.6 | 9.6 | 9.6 | 9.6 | 9.5 | 9.5 | 15.6 | 15.7 | 15.6 | 19.8 | 19.9 | 19.8 |
| 16723 | 6.9 | 6.6 | 6.8 | 10.7 | 10.4 | 10.6 | 10.8 | 10.4 | 10.6 | 17.8 | 16.8 | 17.3 | 22.9 | 21.9 | 22.4 |
| 16724 | 6.0 | 5.5 | 5.7 | 8.0 | 7.5 | 7.7 | 8.1 | 7.4 | 7.8 | 11.3 | 12.6 | 12.0 | 13.8 | 16.2 | 15.0 |
| 16725 | 6.3 | 5.7 | 6.1 | 9.2 | 8.3 | 8.9 | 9.1 | 8.2 | 8.7 | 14.6 | 13.4 | 14.0 | 19.1 | 17.5 | 18.3 |
| 16728 | 5.8 | 5.7 | 5.7 | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 | 13.4 | 14.1 | 13.8 | 17.8 | 18.4 | 18.1 |
| 16730 | 7.3 | 6.8 | 7.1 | 11.5 | 10.9 | 11.2 | 12.1 | 10.6 | 11.4 | 20.1 | 17.7 | 18.9 | 25.9 | 22.5 | 24.2 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 1): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | POSTPARTUM DAY 1 | | | | | | | |
| 16616 | 6.7 | 7.1 | 7.1 | 7.0 | 6.8 | 6.4 | 6.3 | 6.0 | 5.7 | 6.7 | 7.4 | 7.1 | 6.6 | 7.1 | | | | | | |
| 16617 | 5.7 | 6.6 | 5.7 | 5.7 | 6.4 | 6.3 | 6.5 | 5.9 | 6.9 | 6.1 | 6.0 | 5.6 | 6.0 | 4.8 | 4.9 | 4.7 | 6.2 | 5.9 | 6.0 | |
| 16618 | 5.5 | 5.7 | 6.7 | 5.7 | 5.8 | 5.5 | 6.0 | 5.6 | 5.8 | 5.9 | 5.5 | 6.0 | 5.9 | 5.7 | 5.7 | 5.4 | 5.2 | 5.9 | 5.5 | 6.0 |
| | 4.5 | 5.6 | | | | | | | | | | | | | | | | | | |
| 16619 | 7.3 | 7.0 | 6.8 | 6.9 | 5.6 | 6.9 | 6.6 | 7.0 | 6.4 | 6.1 | 6.2 | 6.7 | 6.5 | 6.1 | | | | | | |
| 16620 | 6.7 | 6.8 | 6.6 | 5.7 | 6.0 | 6.6 | 6.5 | 6.1 | 6.2 | 6.3 | 6.3 | 4.8 | 6.6 | | | | | | | |
| 16621 | 4.7 | 5.0 | 5.5 | 5.4 | 5.6 | 5.2 | 5.1 | 4.6 | 5.0 | 4.8 | 4.8 | 5.1 | 4.9 | 4.8 | 5.1 | | | | | |
| 16623 | 7.1 | 6.8 | 7.0 | 6.6 | 6.5 | 6.4 | 6.3 | 6.5 | 6.6 | 6.4 | 6.0 | 6.2 | 6.6 | 5.8 | 6.2 | 5.9 | 6.3 | | | |
| 16625 | 6.4 | 6.1 | 6.3 | 6.0 | 6.0 | 6.0 | 5.8 | 6.0 | 5.8 | 5.7 | 5.7 | 5.3 | 5.4 | 5.3 | 5.3 | 6.7 | | | | |
| 16626 | 6.6 | 7.2 | 6.9 | 6.7 | 7.2 | 7.3 | 7.1 | 6.4 | 6.0 | 6.3 | 7.2 | 6.6 | 7.2 | 6.4 | 6.2 | 6.5 | | | | |
| 16629 | 5.9 | 6.8 | 6.0 | 6.0 | 6.6 | 6.4 | 6.1 | 6.7 | 6.3 | 5.5 | 6.9 | 6.4 | 6.1 | 5.6 | 5.8 | 5.7 | 6.5 | | | |
| 16630 | 7.0 | 6.7 | 6.5 | 6.3 | 6.2 | 6.2 | 6.2 | 5.9 | 6.2 | 6.4 | 5.9 | 6.1 | 5.2 | | | | | | | |
| 16631 | 6.7 | 6.0 | 7.1 | 8.1 | 6.7 | 5.1 | 6.2 | 6.7 | 6.7 | 6.5 | 6.8 | 6.1 | 6.5 | 6.9 | 6.8 | 6.2 | 6.5 | | | |
| 16634 | 7.0 | 6.1 | 6.1 | 6.5 | 6.3 | 6.6 | 6.0 | 6.5 | 6.3 | 5.4 | 6.2 | 5.8 | 5.9 | 6.0 | | | | | | |
| 16635 | 7.2 | 6.5 | 7.2 | 6.6 | 6.6 | 6.5 | 6.7 | 7.0 | 6.1 | 5.6 | 6.5 | FS | | | | | | | | |
| 16636 | 5.3 | 5.6 | 5.9 | 5.6 | 5.9 | 5.3 | 5.6 | 4.6 | 5.7 | 5.8 | 5.2 | 5.9 | 5.4 | 4.1 | 5.6 | 5.6 | | | | |
| 16637 | 6.1 | 5.9 | 5.9 | 6.2 | 6.3 | 5.9 | 6.3 | 6.4 | 6.0 | 6.3 | 5.9 | 5.8 | 5.7 | 4.6 | 6.0 | 5.9 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 2): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | POSTPARTUM DAY 1 | | | | | | | |
| 16640 | 6.0 | 5.8 | 6.2 | 6.6 | 6.9 | 6.3 | 6.8 | 6.5 | 6.0 | 6.3 | 6.1 | 5.9 | 6.4 | 5.7 | 6.1 | | | | | |
| 16641 | 6.1 | 7.0 | 7.1 | 7.1 | 6.9 | 6.8 | 6.8 | 6.8 | 6.6 | 6.3 | 6.4 | 6.7 | 6.7 | 6.9 | 6.5 | | | | | |
| 16643 | 7.3 | 7.3 | 6.8 | 6.5 | 7.1 | 7.0 | 6.6 | 6.7 | 7.0 | 6.5 | 6.6 | 6.8 | | | | | | | | |
| 16644 | 5.5 | 5.3 | 6.1 | 5.5 | 5.9 | 5.6 | 5.9 | 5.7 | 5.5 | 5.7 | 5.1 | 4.9 | 5.4 | 4.9 | 5.3 | 5.0 | 5.1 | 5.3 | FS | |
| 16645 | 7.4 | 7.1 | 7.3 | 6.9 | 7.2 | 6.9 | 7.3 | 7.0 | 6.9 | 6.6 | 6.8 | 7.3 | 6.7 | 6.5 | | | | | | |
| 16646 | 6.8 | 6.1 | 6.8 | 6.8 | 6.8 | 6.8 | 6.6 | 6.3 | 6.4 | 5.8 | 6.2 | 6.1 | 6.3 | 6.3 | 6.2 | | | | | |
| 16647 | 6.2 | 5.0 | 5.6 | 5.9 | 5.4 | 6.1 | 5.3 | 5.5 | 5.0 | 5.3 | 5.7 | 5.7 | 4.9 | 5.6 | | | | | | |
| 16649 | 5.9 | 6.0 | 5.2 | 5.4 | 5.7 | 5.7 | 6.0 | 6.2 | 6.5 | 5.4 | 5.5 | 6.2 | 3.6 | 5.9 | 5.7 | 5.4 | 5.7 | | | |
| 16650 | 6.3 | 5.4 | 6.8 | 5.8 | 6.2 | 6.8 | 5.5 | 6.3 | 6.3 | 5.7 | 5.7 | 5.7 | 5.8 | 5.8 | 5.8 | 6.0 | 5.6 | 6.1 | | |
| 16651 | 7.0 | 6.7 | 6.4 | 6.9 | 6.6 | 6.2 | 6.8 | 6.0 | 6.0 | 5.9 | 6.4 | 6.6 | 6.2 | 6.4 | 6.5 | | | | | |
| 16653 | 7.1 | 7.0 | 6.7 | 6.5 | 7.2 | 6.8 | 6.0 | 6.5 | 6.3 | 6.2 | 6.6 | 6.4 | | | | | | | | |
| 16654 | 6.1 | 5.6 | 6.1 | 6.4 | 5.5 | 5.9 | 6.4 | 6.2 | 6.3 | 6.5 | 6.0 | 6.1 | 6.6 | 6.2 | 6.4 | 5.7 | | | | |
| 16655 | 6.6 | 6.2 | 6.1 | 6.8 | 6.6 | 6.7 | 6.4 | 6.5 | 6.5 | 6.3 | 7.1 | 5.9 | 6.2 | 5.9 | 6.1 | 6.0 | | | | |
| 16656 | 6.8 | 6.8 | 6.1 | 6.6 | 6.1 | 6.1 | 6.4 | 5.9 | 5.7 | 6.4 | 6.0 | 6.1 | 6.7 | | | | | | | |
| 16657 | 6.4 | 6.1 | 6.1 | 6.4 | 6.4 | 5.8 | 5.7 | 6.7 | 6.5 | 6.4 | 5.7 | 5.6 | 5.8 | 5.9 | 5.0 | 6.2 | 6.3 | | | |
| 16659 | 7.7 | 7.0 | 6.9 | 7.3 | 6.5 | 6.5 | 6.4 | 6.4 | 6.3 | 6.2 | 6.7 | 6.1 | 6.9 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 3): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | POSTPARTUM DAY 1 | | | | | | | |
| 16662 | 6.5 | 6.5 | 6.2 | 6.1 | 6.5 | 6.5 | 6.2 | 6.1 | 5.6 | 5.8 | 5.8 | 6.0 | 6.2 | 6.2 | | | | | | |
| 16664 | 6.6 | 6.9 | 7.3 | 6.1 | 6.6 | 6.1 | 6.5 | 5.7 | 6.2 | 6.7 | 6.3 | 6.1 | 6.0 | 6.1 | 5.5 | | | | | |
| 16665 | 5.8 | 5.6 | 5.9 | 5.4 | 6.0 | 5.4 | 6.3 | 5.4 | 5.5 | 5.3 | 5.6 | 5.7 | 5.5 | 5.5 | 5.2 | | | | | |
| 16666 | 6.1 | 6.6 | 6.6 | 6.3 | 5.8 | 6.4 | 5.7 | 6.2 | 5.7 | 5.9 | 6.1 | 6.8 | 6.1 | 6.1 | 5.7 | FU | | | | |
| 16667 | 6.9 | 6.4 | 6.6 | 6.1 | 6.0 | 6.5 | 6.4 | 6.2 | 6.3 | 6.0 | 6.5 | 6.7 | 6.4 | 6.3 | | | | | | |
| 16668 | 7.3 | 6.8 | 7.3 | 6.5 | 6.9 | 7.2 | 7.1 | 6.0 | 6.9 | 7.0 | 6.9 | 6.3 | 6.9 | 6.9 | | | | | | |
| 16669 | 6.6 | 6.3 | 6.5 | 6.6 | 6.8 | 6.2 | 6.7 | 6.3 | 6.6 | 6.3 | 5.9 | 5.9 | 6.1 | 6.2 | 6.2 | 5.8 | 2.4 | | | |
| 16670 | 6.4 | 6.4 | 6.1 | 6.0 | 6.3 | 6.6 | 7.0 | 6.8 | 6.7 | 6.2 | 6.4 | 5.7 | 6.2 | 6.3 | | | | | | |
| 16673 | 6.4 | 5.9 | 6.1 | 5.6 | 6.2 | 6.0 | 5.8 | 6.0 | 6.1 | 6.0 | 6.1 | 5.6 | 5.6 | 5.4 | 5.7 | | | | | |
| 16675 | 6.5 | 6.5 | 6.4 | 6.7 | 6.6 | 7.2 | 6.2 | 6.0 | 6.1 | 6.7 | 5.7 | 6.0 | 5.8 | 5.7 | FS | | | | | |
| 16676 | 5.8 | 6.2 | 6.6 | 6.1 | 6.4 | 6.6 | 6.0 | 6.4 | 6.3 | 6.0 | 5.9 | MD 1 | 6.1 | 6.2 | 5.8 | 5.8 | 5.7 | 6.0 | | |
| 16678 | 6.2 | 6.0 | 6.0 | 5.6 | 6.1 | MD 1 | 5.9 | 6.1 | 6.0 | 6.0 | 5.9 | 5.6 | 5.6 | 5.9 | 5.5 | | | | | |
| 16679 | 6.7 | 7.4 | 6.7 | 6.9 | 7.7 | 6.8 | 6.8 | 7.1 | 7.6 | 6.6 | 6.8 | 6.3 | 6.9 | 6.4 | 6.5 | | | | | |
| 16680 | 5.8 | 6.3 | 6.0 | 6.0 | 5.8 | 6.2 | MS | 6.0 | 5.3 | 5.6 | 6.1 | 6.1 | 5.8 | 5.9 | 5.8 | | | | | |
| 16681 | 5.9 | 6.0 | 6.1 | 6.0 | 6.2 | 6.0 | MD 1 | 6.4 | 5.4 | 6.2 | 6.2 | 5.2 | 6.2 | 5.2 | 5.7 | 5.9 | | | | |
| 16683 | 6.1 | 6.3 | 6.4 | 6.6 | 6.5 | 6.5 | 6.7 | 6.7 | 6.4 | 6.5 | 6.0 | 6.2 | 6.0 | 6.6 | 6.2 | 6.0 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 4): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | POSTPARTUM DAY 1 | | | | | | |
| 16685 | 6.8 | 6.8 | 6.6 | 7.2 | 6.3 | 7.0 | 6.8 | 6.8 | 6.0 | 6.1 | 6.6 | 6.0 | 5.9 | 6.4 | | | | | | |
| 16686 | 7.6 | 6.0 | 7.0 | 6.9 | 6.0 | 7.1 | 6.3 | 6.8 | 7.5 | 6.9 | 6.4 | 6.1 | 6.7 | 6.9 | 6.0 | 6.8 | 6.1 | 6.5 | | |
| 16687 | 6.5 | 7.1 | 6.9 | 6.3 | 7.2 | 6.9 | 6.8 | 7.1 | 6.5 | 6.7 | 5.9 | 6.3 | 6.6 | | | | | | | |
| 16688 | 6.0 | 5.9 | 5.2 | 3.6 | 5.4 | 5.2 | 5.8 | 5.3 | 5.7 | 5.7 | 5.5 | 4.8 | 5.3 | 5.5 | 5.4 | 4.9 | 5.4 | 4.9 | | |
| 16689 | 6.2 | 6.6 | 6.5 | 6.1 | 6.6 | 6.2 | 6.0 | 6.5 | 6.3 | 6.6 | 6.9 | 5.8 | 5.2 | 6.4 | 6.1 | 5.7 | 6.1 | | | |
| 16690 | 6.9 | 5.4 | 5.6 | 6.9 | 6.7 | 6.5 | 6.3 | 6.0 | 6.1 | 5.7 | 5.8 | 5.1 | 5.6 | 5.8 | 6.2 | 6.3 | 6.2 | 5.9 | 5.8 | |
| 16692 | 7.3 | 6.8 | 7.2 | 6.7 | 6.8 | 6.2 | 6.2 | 6.4 | 6.5 | 6.4 | | | | | | | | | | |
| 16693 | 6.3 | 6.7 | 5.6 | 6.5 | 7.0 | 5.8 | 5.9 | 6.6 | 6.1 | 6.1 | 6.5 | 6.4 | 6.1 | | | | | | | |
| 16695 | 6.8 | 6.9 | 6.7 | 6.5 | 6.1 | 6.9 | 6.6 | 6.2 | 6.1 | 6.2 | 6.0 | 6.2 | 6.1 | 5.9 | 6.3 | | | | | |
| 16696 | 6.0 | 6.9 | 6.4 | 6.1 | 6.7 | 6.2 | 6.3 | 5.6 | 5.8 | 5.5 | 6.3 | 5.6 | 5.4 | 5.5 | 5.7 | | | | | |
| 16697 | 6.7 | 6.9 | 6.9 | 6.7 | 7.0 | 7.0 | 6.8 | 6.5 | 7.2 | 6.6 | 7.1 | 6.0 | 7.1 | | | | | | | |
| 16698 | 5.8 | 6.3 | 6.3 | 5.6 | 6.0 | 6.9 | 6.0 | 3.3 | 5.7 | 5.7 | MD 1 | 5.8 | 6.2 | 5.4 | 5.8 | 5.7 | 5.6 | 5.3 | | |
| 16699 | 6.2 | 5.9 | 6.5 | 6.8 | 6.3 | MD 1 | MD 1 | 6.1 | 6.0 | 6.0 | 5.9 | 5.9 | 5.6 | 6.3 | 5.7 | 5.7 | 5.2 | 5.9 | 5.6 | |
| 16701 | 6.4 | 6.6 | 6.6 | 6.0 | 6.5 | 6.8 | 6.5 | 7.1 | 6.5 | 5.9 | 5.8 | 6.2 | 6.1 | 6.6 | 6.6 | | | | | |
| 16706 | 7.2 | 6.8 | 6.9 | 6.8 | 6.4 | 6.8 | 6.4 | 6.4 | 6.6 | 6.5 | 6.2 | 5.7 | 6.1 | 6.4 | 6.2 | 6.2 | | | | |
| 16707 | 6.1 | 6.1 | 6.4 | 6.3 | 6.5 | 6.4 | 6.5 | 6.4 | 6.5 | 6.4 | 5.8 | 6.3 | 6.6 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

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TABLE C40 (PAGE 5): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | POSTPARTUM DAY 1 | | | | | | | |
| 16708 | 6.5 | 6.6 | 6.6 | 6.4 | 6.5 | 6.6 | 6.3 | 5.6 | 6.2 | 5.7 | 5.5 | 5.4 | 6.0 | 6.1 | | | | | | |
| 16709 | 6.4 | 5.7 | 5.9 | 6.2 | 6.3 | 5.3 | 6.0 | 6.1 | 5.3 | 6.2 | 5.6 | 5.8 | 6.0 | 5.8 | 5.5 | 5.7 | | | | |
| 16711 | 5.3 | 5.0 | 5.5 | 5.1 | 5.0 | 5.1 | 5.7 | 5.6 | 5.5 | 5.3 | 5.6 | 5.5 | 5.4 | 5.6 | 4.5 | 4.8 | 5.4 | | | |
| 16712 | 7.4 | 7.1 | 6.4 | 6.3 | 6.6 | 6.1 | 6.2 | 6.7 | 6.8 | 6.5 | 6.1 | 6.6 | | | | | | | | |
| 16713 | 6.0 | 6.0 | 5.7 | 6.0 | 6.0 | 5.8 | 5.9 | 5.8 | 5.7 | 5.8 | 5.8 | 5.8 | | | | | | | | |
| 16715 | 6.5 | 6.1 | 6.8 | 6.9 | 6.6 | 6.4 | 6.3 | 6.0 | 6.2 | 6.0 | 6.6 | 6.4 | 6.6 | 6.7 | | | | | | |
| 16716 | 5.6 | 5.5 | 6.0 | 6.0 | 5.7 | 5.2 | 6.1 | 5.0 | 5.1 | 4.9 | 5.4 | 6.1 | 5.4 | 5.6 | 5.4 | 5.2 | | | | |
| 16717 | 6.8 | 6.2 | 6.9 | 6.7 | 6.7 | 7.2 | 5.7 | 6.0 | 6.7 | 6.4 | 6.1 | 5.5 | 6.4 | 6.8 | 6.9 | 6.0 | 6.1 | 6.2 | 5.9 | |
| 16718 | 5.7 | 5.5 | 5.7 | 5.3 | 5.1 | 5.2 | 5.5 | MS | 5.3 | 5.2 | 5.2 | 5.0 | 5.2 | 5.3 | 5.4 | 4.7 | | | | |
| 16719 | 6.4 | 7.2 | 7.4 | 6.4 | 7.2 | 7.8 | 7.7 | 7.3 | 7.1 | 6.9 | 6.9 | 6.1 | 6.5 | 6.4 | | | | | | |
| 16722 | 6.8 | 7.5 | 6.3 | 7.1 | 6.1 | 6.4 | 6.8 | 7.3 | 7.0 | 6.4 | 6.0 | 6.1 | 6.6 | 6.6 | | | | | | |
| 16723 | 6.6 | 7.3 | 7.3 | 6.8 | 7.1 | 6.5 | 6.9 | 5.3 | 6.6 | 6.8 | 7.1 | 6.6 | 7.0 | | | | | | | |
| 16724 | 6.4 | 5.9 | 6.1 | 5.7 | 6.0 | 5.9 | 5.6 | 5.6 | 5.7 | 5.2 | 5.1 | 6.0 | 5.5 | 5.4 | | | | | | |
| 16725 | 5.8 | 6.2 | 6.5 | 6.0 | 6.9 | 6.5 | 6.6 | 6.0 | 6.1 | 6.7 | MS | 5.1 | 6.5 | 5.8 | 5.6 | 5.7 | FS | | | |
| 16728 | 5.6 | 6.1 | 6.3 | 5.6 | 5.6 | 5.7 | 5.7 | 5.9 | 5.7 | 6.0 | 5.6 | 5.3 | 5.5 | 5.3 | 5.8 | 6.1 | | | | |
| 16730 | 7.6 | 7.6 | 8.0 | 7.7 | 7.3 | 7.0 | 6.3 | 7.1 | 6.1 | 6.5 | 6.8 | 7.2 | 7.4 | 6.7 | 6.9 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 6): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | POSTPARTUM DAY 5 PRECULLING | | | | | | | |
| 16616 | 9.4 | 9.7 | 9.9 | 8.0 | 9.8 | 8.9 | 9.0 | 9.7 | 9.7 | 8.7 | 10.0 | 10.0 | 8.2 | 9.4 | | | | | | |
| 16617 | 9.4 | 9.4 | 7.6 | 8.7 | 9.4 | 7.5 | 10.4 | 9.3 | 9.0 | 8.7 | 9.2 | 9.5 | 7.6 | 8.5 | 6.2 | 9.0 | 8.6 | 7.0 | FD 2 | |
| 16618 | 8.2 | 8.4 | 9.1 | 7.6 | 8.9 | 9.2 | 9.0 | 10.7 | 9.3 | 8.6 | 9.3 | 8.3 | 6.2 | 6.8 | 7.3 | 9.3 | 8.8 | 9.0 | 8.2 | 8.0 |
| | 6.9 | FM 2 | | | | | | | | | | | | | | | | | | |
| 16619 | 10.3 | 10.7 | 10.2 | 10.5 | 9.9 | 8.2 | 10.9 | 11.2 | 10.8 | 9.2 | 10.4 | 9.7 | 9.8 | 9.8 | | | | | | |
| 16620 | 9.1 | 8.9 | 9.6 | 9.0 | 7.1 | 8.8 | 9.6 | 10.2 | 8.6 | 9.1 | 8.9 | 9.1 | 9.2 | | | | | | | |
| 16621 | 7.3 | 8.7 | 7.5 | 8.1 | 8.6 | 8.0 | 6.8 | 8.6 | 7.9 | 7.5 | 8.5 | 8.3 | 7.6 | 8.1 | 7.9 | | | | | |
| 16623 | 9.7 | 10.2 | 11.1 | 11.0 | 8.9 | 9.7 | 9.9 | 9.8 | 9.8 | 11.0 | 9.7 | 10.0 | 8.9 | 8.5 | 10.2 | 9.7 | 8.9 | | | |
| 16625 | 9.3 | 9.0 | 9.2 | 8.9 | 9.4 | 9.6 | 9.1 | 9.3 | 10.0 | 8.7 | 8.2 | 8.7 | 8.0 | 8.5 | 8.2 | 7.5 | | | | |
| 16626 | 9.8 | 9.9 | 10.5 | 10.5 | 9.1 | 9.8 | 10.2 | 9.6 | 8.8 | 9.0 | 9.0 | 8.9 | 8.7 | 8.9 | 9.0 | 10.0 | | | | |
| 16629 | 9.1 | 8.3 | 8.5 | 8.9 | 9.8 | 8.7 | 9.2 | 8.3 | 8.5 | 9.0 | 8.8 | 8.1 | 9.0 | 7.8 | 8.1 | 8.2 | 8.2 | | | |
| 16630 | 10.9 | 11.1 | 10.2 | 10.6 | 11.3 | 10.4 | 10.5 | 9.8 | 10.4 | 8.7 | 9.5 | 10.5 | 9.9 | | | | | | | |
| 16631 | 10.9 | 9.4 | 12.5 | 6.5 | 10.3 | 8.7 | 10.4 | 9.7 | 9.6 | 9.5 | 10.1 | 9.1 | 10.5 | 10.0 | 9.3 | 10.3 | 9.6 | | | |
| 16634 | 9.6 | 10.5 | 8.1 | 9.2 | 9.0 | 9.8 | 10.2 | 8.7 | 9.2 | 9.9 | 9.6 | 8.6 | 8.8 | 9.1 | | | | | | |
| 16635 | 12.0 | 10.9 | 11.2 | 12.3 | 9.6 | 10.1 | 11.9 | 11.5 | 11.0 | 10.7 | 11.0 | FS | | | | | | | | |
| 16636 | 8.4 | 8.2 | 8.4 | 8.0 | 8.5 | 8.3 | 7.5 | 7.3 | 8.2 | 8.6 | 8.7 | 7.2 | 8.4 | 8.0 | 8.2 | FD 2 | | | | |
| 16637 | 6.4 | 6.9 | 7.4 | MM 5 | 6.9 | 7.3 | 5.6 | 7.7 | 6.8 | 7.5 | 4.4 | FD 5 | 5.9 | 7.3 | 6.8 | 5.5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 7): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | POSTPARTUM DAY 5 PRECULLING | | | | | | | |
| 16640 | 9.5 | 8.7 | 8.8 | 9.6 | 9.5 | 8.7 | 10.4 | 8.6 | 9.1 | 9.1 | 9.3 | 8.7 | 8.6 | 9.4 | 8.3 | | | | | |
| 16641 | 10.7 | 10.4 | 8.5 | 8.9 | 10.0 | 10.2 | 10.5 | 10.0 | 10.1 | 9.4 | 9.4 | 10.8 | 9.7 | 9.2 | 9.6 | | | | | |
| 16643 | 9.4 | 10.0 | 9.7 | 10.1 | 9.0 | 9.2 | 8.4 | 8.3 | 9.7 | 8.9 | 9.4 | 9.2 | | | | | | | | |
| 16644 | 8.1 | 8.4 | 9.1 | 6.5 | 8.6 | 9.4 | 9.3 | 8.7 | 8.8 | 7.4 | 8.1 | 8.2 | 7.3 | 6.9 | 7.6 | 8.7 | FD 2 | FD 2 | FS | |
| 16645 | 10.1 | 10.3 | 9.6 | 9.9 | 10.1 | 9.2 | 9.8 | MM 2 | 9.7 | 9.8 | 8.6 | 8.8 | 9.1 | 9.4 | | | | | | |
| 16646 | 9.5 | 8.9 | 8.5 | 9.9 | 9.7 | 9.5 | 10.0 | 9.2 | 9.8 | 8.5 | 8.4 | 9.3 | 9.3 | 9.0 | 6.1 | | | | | |
| 16647 | 8.8 | 9.6 | 9.8 | 8.9 | 6.1 | MM 2 | 9.1 | 8.6 | 9.2 | 9.3 | 7.2 | 7.5 | 8.2 | FM 3 | | | | | | |
| 16649 | 8.5 | 7.5 | MD 5 | 5.5 | 6.0 | 8.0 | 7.0 | 7.1 | 5.7 | 8.1 | 7.7 | 8.1 | 6.8 | 6.7 | FM 5 | 6.8 | 6.2 | | | |
| 16650 | 8.9 | 8.2 | 9.7 | 9.4 | 9.4 | 8.8 | 8.9 | 9.4 | MM 2 | 9.3 | 8.2 | 8.5 | 8.5 | 7.7 | 9.2 | 7.9 | 8.1 | 8.7 | | |
| 16651 | 9.5 | 10.1 | 10.0 | 9.3 | 9.5 | 9.2 | 9.7 | 9.2 | 8.9 | 8.8 | 7.8 | 10.2 | 9.1 | 8.5 | 8.7 | | | | | |
| 16653 | 10.3 | 10.0 | 9.6 | 10.6 | 9.7 | 9.7 | 9.1 | 10.3 | 9.2 | 8.9 | 9.3 | 9.7 | | | | | | | | |
| 16654 | 8.2 | 8.8 | 9.4 | 9.7 | 9.4 | 9.2 | 9.4 | 9.0 | 8.2 | 8.3 | 8.2 | 8.3 | 9.2 | 9.0 | 9.4 | 9.5 | | | | |
| 16655 | 9.6 | 9.8 | 9.8 | 9.9 | 10.0 | 9.1 | 9.6 | 9.8 | 11.0 | 9.3 | 8.8 | 8.8 | 9.0 | 9.0 | 8.5 | 9.1 | | | | |
| 16656 | 10.0 | 8.4 | 9.6 | 8.8 | 9.9 | 9.2 | 9.0 | 9.1 | 9.0 | 8.7 | 8.9 | 8.7 | 9.0 | | | | | | | |
| 16657 | 10.4 | 11.0 | 6.5 | 6.8 | 8.7 | 8.2 | 7.4 | 10.2 | 9.5 | 7.7 | 10.6 | 10.2 | 8.6 | 8.3 | 9.1 | 8.7 | 6.5 | | | |
| 16659 | 9.7 | 9.8 | 11.1 | 9.9 | 9.7 | 7.8 | 6.6 | 8.2 | 9.9 | 8.8 | 10.2 | 9.5 | 9.7 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 8): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | POSTPARTUM DAY 5 PRECULLING | | | | | | | |
| 16662 | 9.3 | 9.5 | 9.5 | 9.0 | 10.1 | 9.4 | 8.3 | 9.3 | 9.3 | 9.5 | 9.0 | 8.9 | 8.5 | 9.2 | | | | | | |
| 16664 | 7.3 | 7.3 | 8.2 | 7.3 | 8.1 | 8.1 | 9.2 | 8.7 | 7.4 | 8.0 | 7.3 | 7.1 | 6.3 | 7.9 | 7.4 | | | | | |
| 16665 | 8.1 | 7.6 | 8.3 | 8.0 | 8.5 | 7.9 | 8.4 | 7.6 | 7.5 | 7.4 | 7.1 | 7.5 | 7.1 | 7.4 | 8.2 | | | | | |
| 16666 | 8.6 | 9.1 | 9.6 | 8.3 | 9.3 | 8.8 | 10.0 | 8.4 | 8.2 | 8.8 | 9.5 | 8.4 | 8.9 | 8.9 | 8.4 | FU | | | | |
| 16667 | 9.3 | 8.8 | 9.0 | 8.9 | 8.6 | 9.3 | 9.0 | 8.8 | 8.8 | 8.5 | 8.9 | 8.7 | 8.8 | 8.6 | | | | | | |
| 16668 | 10.6 | 11.4 | 10.4 | 10.7 | 11.2 | 10.1 | 10.2 | 10.8 | 9.8 | 10.7 | 10.7 | 10.4 | 9.1 | 8.7 | | | | | | |
| 16669 | 8.6 | 8.9 | 9.0 | 9.4 | 8.7 | 9.5 | 6.6 | 8.6 | 8.9 | 8.7 | 9.4 | 8.8 | 8.6 | 7.2 | 8.6 | 9.0 | FD 2 | | | |
| 16670 | 9.1 | 6.8 | 10.7 | 9.9 | 10.6 | 7.1 | 7.4 | 5.9 | 7.1 | 7.4 | 7.6 | 10.0 | 7.3 | 8.2 | | | | | | |
| 16673 | 8.4 | 8.7 | 8.7 | 8.9 | 9.0 | 8.0 | 7.8 | 8.7 | 8.5 | 8.1 | 8.7 | 6.9 | 8.4 | 8.1 | 8.2 | | | | | |
| 16675 | 9.2 | 8.6 | 9.4 | 8.8 | 8.1 | 8.5 | 7.8 | 8.0 | 7.7 | 9.0 | 8.2 | 7.5 | 8.0 | 7.7 | FS | | | | | |
| 16676 | 10.2 | 9.9 | 8.9 | 10.0 | 8.8 | 9.1 | 8.3 | 9.4 | 8.9 | 9.5 | 8.7 | MD 1 | 8.5 | 9.1 | 8.4 | 8.8 | 8.1 | 8.0 | | |
| 16678 | 9.2 | 9.6 | 8.4 | 9.8 | 9.4 | MD 1 | 9.3 | 9.6 | 9.0 | 8.8 | 8.1 | 9.5 | 9.0 | 9.3 | FM 2 | | | | | |
| 16679 | 9.9 | 10.0 | 10.6 | 11.4 | 9.7 | 10.8 | 11.5 | 11.4 | 10.2 | 9.6 | 9.9 | 10.6 | 10.7 | 10.3 | 9.6 | | | | | |
| 16680 | 8.3 | 8.7 | 8.5 | 8.5 | 6.5 | 8.3 | MS | 8.2 | 7.9 | 8.6 | 8.8 | 7.6 | 8.6 | 8.2 | 8.6 | | | | | |
| 16681 | 6.6 | 7.0 | 6.1 | MD 5 | 8.2 | 6.7 | MD 1 | FD 5 | 7.6 | FD 5 | 6.8 | 8.2 | 5.3 | 8.0 | 6.4 | FD 4 | | | | |
| 16683 | MM 5 | 7.5 | MM 5 | 8.2 | 7.6 | MD 5 | 7.3 | 5.5 | 7.7 | 7.0 | 6.5 | 7.9 | 8.8 | 7.1 | 7.0 | 8.9 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
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TABLE C40 (PAGE 9): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | POSTPARTUM DAY 5 PRECULLING | | | | | | |
| 16685 | 10.5 | 10.2 | 11.1 | 11.3 | 11.2 | 10.1 | 11.3 | 9.3 | 9.9 | 10.3 | 9.0 | 9.8 | 8.3 | 9.7 | | | | | | |
| 16686 | 9.5 | 9.1 | 9.5 | 6.6 | 9.7 | 9.0 | 8.3 | 8.3 | 8.9 | 8.1 | 6.5 | 7.9 | 7.6 | 7.7 | 8.7 | 9.4 | 8.0 | 9.3 | | |
| 16687 | 11.0 | 11.5 | 10.2 | 11.6 | 11.3 | 11.8 | 10.6 | 12.2 | 11.1 | 11.2 | 10.8 | 10.3 | FM 2 | | | | | | | |
| 16688 | 7.8 | 8.6 | 7.7 | 8.4 | 4.2 | 9.2 | 8.4 | 8.8 | 7.8 | 8.4 | 8.2 | 7.1 | 6.4 | 8.4 | 7.8 | 7.6 | 7.8 | 7.3 | | |
| 16689 | 7.8 | 9.3 | 8.9 | 9.7 | 9.9 | 9.0 | 10.1 | 9.8 | 10.5 | 8.3 | 9.8 | 9.7 | 9.5 | 8.7 | 9.1 | 8.4 | 9.5 | | | |
| 16690 | 8.2 | 6.9 | 7.6 | 9.0 | 8.9 | 8.5 | 7.1 | 8.3 | 7.6 | 7.2 | 7.7 | 7.4 | 8.0 | 6.5 | 7.2 | FM 5 | 7.6 | 7.9 | 8.1 | |
| 16692 | 10.4 | 9.8 | 11.8 | 11.7 | 9.4 | 8.9 | 8.8 | 9.8 | 10.8 | 7.4 | | | | | | | | | | |
| 16693 | 9.8 | 11.1 | 11.0 | 9.0 | 11.3 | 10.1 | 10.5 | 10.2 | 10.4 | 10.4 | 10.8 | 10.2 | 10.4 | | | | | | | |
| 16695 | 9.7 | 10.2 | 10.6 | 10.0 | 10.6 | 10.3 | 8.8 | 9.7 | 9.5 | 9.7 | 9.5 | 9.5 | 9.2 | 8.9 | 9.2 | | | | | |
| 16696 | 9.3 | 7.3 | 6.3 | 9.1 | 11.0 | 8.9 | 8.7 | 8.6 | 8.8 | 6.8 | 9.0 | 7.6 | 6.8 | 5.0 | FM 2 | | | | | |
| 16697 | 11.1 | 11.1 | 11.1 | 11.3 | 11.5 | 10.3 | 10.1 | 10.5 | 11.7 | 11.2 | 10.6 | 11.6 | 10.8 | | | | | | | |
| 16698 | 7.9 | 8.3 | 8.4 | 8.7 | 8.4 | 8.6 | 10.4 | 8.8 | 8.4 | MM 2 | MD 1 | 7.9 | 8.1 | 8.3 | 7.7 | 8.1 | 7.6 | 7.8 | | |
| 16699 | 9.0 | 9.1 | 8.8 | 9.1 | 9.8 | MD 1 | MD 1 | 9.6 | 9.0 | 8.4 | 10.2 | 10.0 | 7.9 | 10.0 | 9.1 | 9.8 | 8.5 | 9.2 | 9.0 | |
| 16701 | 8.8 | 8.8 | 8.3 | 8.4 | 8.4 | 8.5 | 8.5 | 8.2 | 8.2 | 8.7 | 7.8 | 8.7 | 7.8 | 8.5 | 8.4 | | | | | |
| 16706 | 9.6 | 10.1 | 9.5 | 9.7 | 10.1 | 10.0 | 9.5 | 10.2 | 10.4 | 7.1 | 8.9 | 9.1 | 7.6 | 9.2 | 8.4 | 7.5 | | | | |
| 16707 | 8.7 | 8.6 | 9.3 | 9.3 | 9.6 | 9.6 | 9.1 | 9.3 | 9.5 | 9.4 | 9.7 | 8.4 | 9.8 | | | | | | | |

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SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

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TABLE C40 (PAGE 10): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | POSTPARTUM DAY 5 PRECULLING | | | | | | | |
| 16708 | 8.5 | 9.0 | 8.3 | 8.1 | 9.4 | 8.5 | 7.8 | 8.5 | 7.8 | 9.2 | 7.6 | 8.4 | 7.6 | 7.4 | | | | | | |
| 16709 | 7.2 | 6.6 | 6.0 | 8.4 | 6.3 | 8.3 | 7.9 | 9.3 | 9.1 | 7.1 | 9.1 | 8.1 | 8.7 | 6.8 | 8.0 | 5.4 | | | | |
| 16711 | 7.3 | 8.3 | 7.7 | 7.3 | 7.1 | 7.1 | 6.8 | 7.7 | 7.4 | 8.1 | 7.1 | 6.9 | 7.0 | 7.8 | 5.6 | 7.4 | FD 5 | | | |
| 16712 | 10.9 | 11.6 | 9.9 | 9.7 | 10.3 | 10.3 | 10.2 | 9.8 | 9.3 | 10.0 | 10.7 | 10.4 | | | | | | | | |
| 16713 | 9.1 | 9.5 | 8.8 | 8.9 | 9.0 | 9.3 | 8.8 | 9.3 | 9.1 | 9.1 | 9.1 | 9.1 | | | | | | | | |
| 16715 | 10.4 | 9.5 | 9.9 | 9.9 | 10.0 | 10.0 | 10.4 | 9.6 | 9.3 | 9.5 | 9.7 | 10.2 | 8.7 | 9.1 | | | | | | |
| 16716 | 8.7 | 8.3 | 6.4 | 8.4 | 8.6 | 8.6 | 9.2 | 8.1 | 8.2 | 7.9 | 7.9 | 7.8 | 7.7 | 8.6 | 6.8 | 8.7 | | | | |
| 16717 | 9.9 | 9.4 | 8.4 | 9.5 | 8.8 | 9.9 | 7.6 | 9.8 | 9.9 | 9.4 | 9.1 | 8.3 | 9.5 | 8.4 | 9.2 | 7.9 | 8.0 | 10.1 | 9.0 | |
| 16718 | 6.8 | 8.2 | 7.8 | 7.9 | 8.4 | 7.3 | 7.9 | MS | 7.0 | 7.6 | 7.5 | 7.7 | 7.8 | 5.2 | 7.4 | 6.2 | | | | |
| 16719 | 9.1 | 10.5 | 9.7 | 10.6 | 9.7 | 9.8 | 10.7 | 9.0 | 9.6 | 8.3 | 9.9 | 9.5 | 9.5 | 8.7 | | | | | | |
| 16722 | 10.0 | 9.2 | 9.2 | 10.1 | 10.6 | 9.4 | 9.8 | 9.8 | 8.8 | 9.0 | 9.5 | 10.0 | 9.9 | FD 4 | | | | | | |
| 16723 | 10.0 | 10.4 | 11.6 | 10.5 | 10.2 | 11.2 | 10.9 | 10.9 | 11.1 | 11.0 | 10.4 | 10.3 | 9.0 | | | | | | | |
| 16724 | 8.3 | 7.5 | 8.6 | 8.1 | 8.0 | 7.6 | 7.4 | 7.7 | 8.4 | 7.2 | 7.2 | 7.7 | 8.0 | 6.6 | | | | | | |
| 16725 | 9.4 | 9.9 | 9.6 | 9.2 | 9.9 | 8.5 | 9.4 | 8.1 | 9.6 | 8.5 | MS | 7.9 | 8.5 | 8.6 | 7.7 | 8.9 | FS | | | |
| 16728 | 8.8 | 8.4 | 8.4 | 8.5 | 7.0 | 7.6 | 8.8 | 7.4 | 8.4 | 8.3 | 8.0 | 8.6 | 7.8 | 8.1 | 8.7 | 8.1 | | | | |
| 16730 | 10.1 | 13.4 | 10.9 | 10.4 | 11.9 | 11.1 | 12.1 | 12.0 | 10.8 | 11.1 | 11.1 | 11.7 | 11.4 | 11.7 | 8.7 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 11): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | POSTPARTUM DAY 5 POSTCULLING | | | | | | |
| 16616 | 9.4 | 9.7 | 9.9 | 8.0 | MC 5 | FC 5 | 9.0 | 9.7 | FC 5 | FC 5 | 10.0 | 10.0 | FC 5 | FC 5 | | | | | | |
| 16617 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 7.5 | 10.4 | 9.3 | 9.0 | FC 5 | FC 5 | 9.5 | 7.6 | 8.5 | FC 5 | 9.0 | FC 5 | FC 5 | FD 2 | |
| 16618 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 9.2 | MC 5 | 10.7 | MC 5 | 8.6 | MC 5 | 8.3 | MC 5 | MC 5 | MC 5 | 9.3 | FC 5 | 9.0 | FC 5 | 8.0 |
| | 6.9 | FM 2 | | | | | | | | | | | | | | | | | | |
| 16619 | 10.3 | MC 5 | 10.2 | MC 5 | MC 5 | MC 5 | MC 5 | 11.2 | 10.8 | FC 5 | 10.4 | 9.7 | 9.8 | 9.8 | | | | | | |
| 16620 | MC 5 | 8.9 | 9.6 | FC 5 | 7.1 | 8.8 | 9.6 | FC 5 | 8.6 | FC 5 | FC 5 | 9.1 | 9.2 | | | | | | | |
| 16621 | MC 5 | 8.7 | 7.5 | 8.1 | 8.6 | FC 5 | FC 5 | 8.6 | 7.9 | FC 5 | FC 5 | 8.3 | FC 5 | FC 5 | 7.9 | | | | | |
| 16623 | MC 5 | MC 5 | MC 5 | MC 5 | 8.9 | MC 5 | 9.9 | MC 5 | 9.8 | 11.0 | FC 5 | 10.0 | FC 5 | 8.5 | 10.2 | 9.7 | FC 5 | | | |
| 16625 | MC 5 | 9.0 | 9.2 | 8.9 | MC 5 | 9.6 | MC 5 | MC 5 | 10.0 | FC 5 | FC 5 | FC 5 | FC 5 | 8.5 | 8.2 | 7.5 | | | | |
| 16626 | MC 5 | 9.9 | 10.5 | 10.5 | 9.1 | MC 5 | FC 5 | FC 5 | 8.8 | 9.0 | FC 5 | FC 5 | 8.7 | FC 5 | FC 5 | 10.0 | | | | |
| 16629 | 9.1 | 8.3 | 8.5 | MC 5 | MC 5 | 8.7 | MC 5 | MC 5 | 8.5 | FC 5 | 8.8 | FC 5 | 9.0 | FC 5 | 8.1 | FC 5 | FC 5 | | | |
| 16630 | 10.9 | 11.1 | 10.2 | MC 5 | MC 5 | 10.4 | FC 5 | 9.8 | 10.4 | FC 5 | 9.5 | 10.5 | FC 5 | | | | | | | |
| 16631 | 10.9 | MC 5 | 12.5 | 6.5 | 10.3 | MC 5 | FC 5 | FC 5 | 9.6 | FC 5 | FC 5 | 9.1 | FC 5 | FC 5 | FC 5 | 10.3 | 9.6 | | | |
| 16634 | MC 5 | MC 5 | MC 5 | 9.2 | 9.0 | 9.8 | 10.2 | MC 5 | 9.2 | MC 5 | FC 5 | 8.6 | 8.8 | 9.1 | | | | | | |
| 16635 | 12.0 | MC 5 | 11.2 | 12.3 | FC 5 | 10.1 | 11.9 | 11.5 | 11.0 | 10.7 | FC 5 | FS | | | | | | | | |
| 16636 | MC 5 | MC 5 | 8.4 | MC 5 | 8.5 | 8.3 | MC 5 | MC 5 | 8.2 | MC 5 | 8.7 | 7.2 | FC 5 | 8.0 | 8.2 | FD 2 | | | | |
| 16637 | MC 5 | 6.9 | 7.4 | MM 5 | 6.9 | MC 5 | MC 5 | 7.7 | MC 5 | 7.5 | FC 5 | FD 5 | 5.9 | 7.3 | 6.8 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 12): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | POSTPARTUM DAY 5 POSTCULLING | | | | | | | |
| 16640 | MC 5 | 8.7 | 8.8 | 9.6 | MC 5 | MC 5 | 10.4 | 8.6 | FC 5 | 9.1 | 9.3 | FC 5 | FC 5 | FC 5 | 8.3 | | | | | |
| 16641 | MC 5 | MC 5 | 8.5 | MC 5 | 10.0 | MC 5 | 10.5 | 10.0 | 10.1 | FC 5 | 9.4 | 10.8 | FC 5 | 9.2 | FC 5 | | | | | |
| 16643 | 9.4 | 10.0 | 9.7 | 10.1 | MC 5 | MC 5 | 8.4 | 8.3 | 9.7 | FC 5 | FC 5 | 9.2 | | | | | | | | |
| 16644 | MC 5 | MC 5 | MC 5 | 6.5 | 8.6 | MC 5 | 9.3 | MC 5 | MC 5 | 7.4 | 8.1 | 8.2 | FC 5 | FC 5 | 7.6 | 8.7 | FD 2 | FD 2 | FS | |
| 16645 | 10.1 | 10.3 | MC 5 | 9.9 | MC 5 | 9.2 | MC 5 | MM 2 | 9.7 | 9.8 | FC 5 | FC 5 | 9.1 | 9.4 | | | | | | |
| 16646 | 9.5 | MC 5 | MC 5 | 9.9 | 9.7 | 9.5 | MC 5 | 9.2 | FC 5 | 8.5 | FC 5 | FC 5 | 9.3 | 9.0 | FC 5 | | | | | |
| 16647 | MC 5 | 9.6 | 9.8 | 8.9 | 6.1 | MM 2 | 9.1 | FC 5 | FC 5 | FC 5 | 7.2 | 7.5 | 8.2 | FM 3 | | | | | | |
| 16649 | 8.5 | 7.5 | MD 5 | MC 5 | MC 5 | 8.0 | MC 5 | 7.1 | MC 5 | FC 5 | 7.7 | 8.1 | 6.8 | 6.7 | FM 5 | FC 5 | FC 5 | | | |
| 16650 | 8.9 | MC 5 | 9.7 | MC 5 | MC 5 | MC 5 | 8.9 | 9.4 | MM 2 | FC 5 | FC 5 | FC 5 | 8.5 | FC 5 | FC 5 | 7.9 | 8.1 | 8.7 | | |
| 16651 | MC 5 | MC 5 | 10.0 | 9.3 | 9.5 | MC 5 | 9.7 | FC 5 | 8.9 | 8.8 | 7.8 | FC 5 | FC 5 | FC 5 | 8.7 | | | | | |
| 16653 | 10.3 | 10.0 | 9.6 | 10.6 | MC 5 | FC 5 | FC 5 | 10.3 | 9.2 | FC 5 | 9.3 | 9.7 | | | | | | | | |
| 16654 | 8.2 | 8.8 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 8.2 | 8.3 | MC 5 | 8.3 | FC 5 | 9.0 | 9.4 | 9.5 | | | | |
| 16655 | MC 5 | 9.8 | 9.8 | MC 5 | 10.0 | MC 5 | MC 5 | 9.8 | 11.0 | FC 5 | 8.8 | FC 5 | FC 5 | FC 5 | 8.5 | 9.1 | | | | |
| 16656 | 10.0 | MC 5 | 9.6 | 8.8 | 9.9 | 9.2 | 9.0 | 9.1 | 9.0 | FC 5 | FC 5 | FC 5 | FC 5 | | | | | | | |
| 16657 | MC 5 | MC 5 | MC 5 | 6.8 | MC 5 | 8.2 | MC 5 | 10.2 | MC 5 | MC 5 | 10.6 | 10.2 | FC 5 | 8.3 | 9.1 | 8.7 | FC 5 | | | |
| 16659 | 9.7 | 9.8 | MC 5 | 9.9 | FC 5 | 7.8 | 6.6 | 8.2 | FC 5 | 8.8 | FC 5 | 9.5 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 13): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | | POSTPARTUM DAY 5 POSTCULLING | | | | | | |
| 16662 | 9.3 | 9.5 | MC 5 | MC 5 | 10.1 | 9.4 | FC 5 | FC 5 | 9.3 | FC 5 | FC 5 | 8.9 | 8.5 | 9.2 | | | | | | |
| 16664 | MC 5 | 7.3 | 8.2 | 7.3 | MC 5 | MC 5 | MC 5 | MC 5 | 7.4 | MC 5 | FC 5 | 7.1 | 6.3 | 7.9 | 7.4 | | | | | |
| 16665 | MC 5 | MC 5 | MC 5 | MC 5 | 8.5 | 7.9 | 8.4 | 7.6 | 7.5 | FC 5 | 7.1 | 7.5 | 7.1 | FC 5 | FC 5 | | | | | |
| 16666 | MC 5 | MC 5 | 9.6 | MC 5 | 9.3 | 8.8 | 10.0 | MC 5 | FC 5 | FC 5 | 9.5 | FC 5 | 8.9 | 8.9 | 8.4 | FU | | | | |
| 16667 | MC 5 | 8.8 | 9.0 | FC 5 | FC 5 | 9.3 | FC 5 | 8.8 | 8.8 | 8.5 | 8.9 | FC 5 | FC 5 | 8.6 | | | | | | |
| 16668 | 10.6 | 11.4 | 10.4 | 10.7 | MC 5 | MC 5 | 10.2 | 10.8 | 9.8 | FC 5 | FC 5 | 10.4 | FC 5 | FC 5 | | | | | | |
| 16669 | 8.6 | 8.9 | 9.0 | MC 5 | MC 5 | MC 5 | 6.6 | MC 5 | 8.9 | FC 5 | FC 5 | 8.8 | 8.6 | FC 5 | FC 5 | 9.0 | FD 2 | | | |
| 16670 | 9.1 | MC 5 | MC 5 | MC 5 | MC 5 | 7.1 | 7.4 | MC 5 | 7.1 | 7.4 | FC 5 | 10.0 | 7.3 | 8.2 | | | | | | |
| 16673 | 8.4 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 8.7 | 8.5 | 8.1 | 8.7 | 6.9 | FC 5 | 8.1 | 8.2 | | | | | |
| 16675 | 9.2 | 8.6 | MC 5 | 8.8 | 8.1 | MC 5 | 7.8 | FC 5 | 7.7 | 9.0 | 8.2 | FC 5 | FC 5 | FC 5 | FS | | | | | |
| 16676 | MC 5 | 9.9 | 8.9 | MC 5 | MC 5 | MC 5 | 8.3 | 9.4 | MC 5 | MC 5 | MC 5 | MD 1 | FC 5 | 9.1 | 8.4 | 8.8 | FC 5 | 8.0 | | |
| 16678 | 9.2 | MC 5 | 8.4 | 9.8 | 9.4 | MD 1 | FC 5 | 9.6 | FC 5 | FC 5 | 8.1 | 9.5 | 9.0 | FC 5 | FM 2 | | | | | |
| 16679 | MC 5 | MC 5 | MC 5 | 11.4 | 9.7 | 10.8 | 11.5 | MC 5 | MC 5 | 9.6 | 9.9 | FC 5 | 10.7 | FC 5 | 9.6 | | | | | |
| 16680 | MC 5 | 8.7 | 8.5 | 8.5 | 6.5 | MC 5 | MS | FC 5 | FC 5 | 8.6 | FC 5 | 7.6 | 8.6 | 8.2 | FC 5 | | | | | |
| 16681 | 6.6 | 7.0 | 6.1 | MD 5 | 8.2 | MC 5 | MD 1 | FD 5 | 7.6 | FD 5 | 6.8 | 8.2 | FC 5 | 8.0 | FC 5 | FD 4 | | | | |
| 16683 | MM 5 | 7.5 | MM 5 | 8.2 | MC 5 | MD 5 | 7.3 | 5.5 | FC 5 | 7.0 | 6.5 | 7.9 | FC 5 | FC 5 | 7.0 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 14): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | POSTPARTUM DAY 5 POSTCULLING | | | | | | |
| 16685 | MC 5 | MC 5 | 11.1 | MC 5 | MC 5 | 10.1 | 11.3 | 9.3 | 9.9 | FC 5 | 9.0 | FC 5 | 8.3 | 9.7 | | | | | | |
| 16686 | 9.5 | 9.1 | 9.5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 8.1 | FC 5 | FC 5 | 7.6 | FC 5 | FC 5 | 9.4 | 8.0 | 9.3 | | |
| 16687 | 11.0 | MC 5 | 10.2 | MC 5 | 11.3 | 11.8 | 10.6 | MC 5 | 11.1 | FC 5 | 10.8 | 10.3 | FM 2 | | | | | | | |
| 16688 | MC 5 | MC 5 | 7.7 | MC 5 | 4.2 | MC 5 | 8.4 | MC 5 | 7.8 | FC 5 | FC 5 | FC 5 | 6.4 | FC 5 | FC 5 | 7.6 | 7.8 | 7.3 | | |
| 16689 | 7.8 | 9.3 | MC 5 | 9.7 | 9.9 | FC 5 | FC 5 | FC 5 | FC 5 | 8.3 | FC 5 | 9.7 | FC 5 | FC 5 | FC 5 | 8.4 | 9.5 | | | |
| 16690 | MC 5 | MC 5 | MC 5 | 9.0 | MC 5 | 8.5 | 7.1 | MC 5 | MC 5 | 7.2 | 7.7 | 7.4 | FC 5 | FC 5 | 7.2 | FM 5 | 7.6 | FC 5 | FC 5 | |
| 16692 | 10.4 | MC 5 | 11.8 | 11.7 | 9.4 | 8.9 | 8.8 | 9.8 | FC 5 | 7.4 | | | | | | | | | | |
| 16693 | MC 5 | MC 5 | 11.0 | MC 5 | MC 5 | 10.1 | 10.5 | 10.2 | FC 5 | 10.4 | 10.8 | 10.2 | 10.4 | | | | | | | |
| 16695 | MC 5 | MC 5 | MC 5 | 10.0 | MC 5 | 10.3 | 8.8 | 9.7 | 9.5 | FC 5 | 9.5 | 9.5 | FC 5 | FC 5 | 9.2 | | | | | |
| 16696 | MC 5 | 7.3 | 6.3 | 9.1 | MC 5 | 8.9 | FC 5 | 8.6 | 8.8 | 6.8 | FC 5 | FC 5 | FC 5 | 5.0 | FM 2 | | | | | |
| 16697 | 11.1 | MC 5 | 11.1 | MC 5 | MC 5 | MC 5 | 10.1 | 10.5 | 11.7 | 11.2 | 10.6 | 11.6 | FC 5 | | | | | | | |
| 16698 | 7.9 | MC 5 | 8.4 | MC 5 | MC 5 | MC 5 | 10.4 | MC 5 | 8.4 | MM 2 | MD 1 | FC 5 | FC 5 | 8.3 | 7.7 | FC 5 | 7.6 | 7.8 | | |
| 16699 | 9.0 | 9.1 | 8.8 | MC 5 | 9.8 | MD 1 | MD 1 | FC 5 | FC 5 | FC 5 | FC 5 | 10.0 | FC 5 | 10.0 | FC 5 | FC 5 | FC 5 | 9.2 | 9.0 | |
| 16701 | 8.8 | MC 5 | MC 5 | 8.4 | 8.4 | 8.5 | FC 5 | 8.2 | FC 5 | FC 5 | FC 5 | 8.7 | 7.8 | 8.5 | FC 5 | | | | | |
| 16706 | MC 5 | MC 5 | 9.5 | MC 5 | MC 5 | 10.0 | 9.5 | 10.2 | MC 5 | 7.1 | FC 5 | FC 5 | 7.6 | FC 5 | 8.4 | 7.5 | | | | |
| 16707 | 8.7 | 8.6 | 9.3 | 9.3 | MC 5 | 9.6 | FC 5 | 9.3 | FC 5 | 9.4 | 9.7 | FC 5 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 15): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | POSTPARTUM DAY 5 POSTCULLING | | | | | | | |
| 16708 | MC 5 | 9.0 | 8.3 | 8.1 | 9.4 | MC 5 | 7.8 | FC 5 | FC 5 | 9.2 | 7.6 | 8.4 | FC 5 | FC 5 | | | | | | |
| 16709 | MC 5 | 6.6 | MC 5 | MC 5 | 6.3 | 8.3 | MC 5 | 9.3 | 9.1 | FC 5 | 9.1 | FC 5 | 8.7 | FC 5 | 8.0 | FC 5 | | | | |
| 16711 | MC 5 | MC 5 | MC 5 | 7.3 | 7.1 | 7.1 | 6.8 | MC 5 | MC 5 | 8.1 | MC 5 | MC 5 | FC 5 | 7.8 | 5.6 | 7.4 | FD 5 | | | |
| 16712 | MC 5 | 11.6 | MC 5 | 9.7 | 10.3 | 10.3 | 10.2 | MC 5 | 9.3 | FC 5 | 10.7 | 10.4 | | | | | | | | |
| 16713 | 9.1 | 9.5 | 8.8 | MC 5 | 9.0 | FC 5 | 8.8 | FC 5 | 9.1 | 9.1 | 9.1 | FC 5 | | | | | | | | |
| 16715 | MC 5 | 9.5 | 9.9 | 9.9 | MC 5 | 10.0 | MC 5 | 9.6 | FC 5 | 9.5 | FC 5 | 10.2 | 8.7 | FC 5 | | | | | | |
| 16716 | 8.7 | MC 5 | 6.4 | MC 5 | MC 5 | 8.6 | 9.2 | MC 5 | 8.2 | FC 5 | 7.9 | FC 5 | 7.7 | 8.6 | FC 5 | FC 5 | | | | |
| 16717 | MC 5 | MC 5 | MC 5 | 9.5 | 8.8 | MC 5 | 7.6 | MC 5 | MC 5 | 9.4 | 9.1 | 8.3 | FC 5 | FC 5 | 9.2 | FC 5 | 8.0 | FC 5 | FC 5 | |
| 16718 | MC 5 | MC 5 | 7.8 | 7.9 | 8.4 | MC 5 | 7.9 | MS | 7.0 | 7.6 | FC 5 | 7.7 | FC 5 | 5.2 | FC 5 | FC 5 | | | | |
| 16719 | 9.1 | 10.5 | MC 5 | MC 5 | 9.7 | MC 5 | MC 5 | MC 5 | 9.6 | 8.3 | 9.9 | 9.5 | FC 5 | 8.7 | | | | | | |
| 16722 | 10.0 | 9.2 | 9.2 | MC 5 | 10.6 | MC 5 | MC 5 | MC 5 | 8.8 | 9.0 | 9.5 | FC 5 | 9.9 | FD 4 | | | | | | |
| 16723 | MC 5 | 10.4 | 11.6 | MC 5 | 10.2 | MC 5 | 10.9 | FC 5 | 11.1 | 11.0 | FC 5 | 10.3 | 9.0 | | | | | | | |
| 16724 | MC 5 | MC 5 | 8.6 | 8.1 | 8.0 | 7.6 | FC 5 | 7.7 | FC 5 | 7.2 | 7.2 | 7.7 | FC 5 | FC 5 | | | | | | |
| 16725 | MC 5 | MC 5 | 9.6 | MC 5 | 9.9 | 8.5 | MC 5 | MC 5 | MC 5 | 8.5 | MS | 7.9 | 8.5 | FC 5 | 7.7 | 8.9 | FS | | | |
| 16728 | 8.8 | MC 5 | 8.4 | 8.5 | 7.0 | FC 5 | FC 5 | FC 5 | FC 5 | 8.3 | FC 5 | FC 5 | 7.8 | 8.1 | 8.7 | FC 5 | | | | |
| 16730 | MC 5 | 13.4 | 10.9 | MC 5 | 11.9 | MC 5 | 12.1 | MC 5 | FC 5 | 11.1 | 11.1 | 11.7 | FC 5 | FC 5 | 8.7 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 16): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | POSTPARTUM DAY 8 | | | | | | | |
| 16616 | 15.8 | 13.8 | 16.8 | 16.2 | MC 5 | FC 5 | 16.7 | 17.9 | FC 5 | FC 5 | 15.7 | 15.9 | FC 5 | FC 5 | | | | | | |
| 16617 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 17.7 | 16.4 | 12.3 | MD 6 | FC 5 | FC 5 | 11.0 | 14.0 | 14.5 | FC 5 | 15.6 | FC 5 | FC 5 | FD 2 | |
| 16618 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 14.0 | MC 5 | 13.6 | MC 5 | 15.5 | MC 5 | 18.4 | MC 5 | MC 5 | MC 5 | 16.3 | FC 5 | 12.2 | FC 5 | 16.0 |
| | 13.7 | FM 2 | | | | | | | | | | | | | | | | | | |
| 16619 | 17.2 | MC 5 | 17.4 | MC 5 | MC 5 | MC 5 | MC 5 | 16.6 | 17.0 | FC 5 | 16.0 | 15.5 | 16.0 | 16.9 | | | | | | |
| 16620 | MC 5 | 15.3 | 16.1 | FC 5 | 15.4 | 12.6 | 15.2 | FC 5 | 15.0 | FC 5 | FC 5 | 16.4 | 16.2 | | | | | | | |
| 16621 | MC 5 | 14.4 | 13.0 | 14.4 | 13.9 | FC 5 | FC 5 | 13.4 | 14.2 | FC 5 | FC 5 | 12.0 | FC 5 | FC 5 | 13.9 | | | | | |
| 16623 | MC 5 | MC 5 | MC 5 | MC 5 | 16.5 | MC 5 | 17.8 | MC 5 | 17.2 | 14.9 | FC 5 | 17.7 | FC 5 | 16.8 | 16.7 | 15.5 | FC 5 | | | |
| 16625 | MC 5 | 15.2 | 15.8 | 15.3 | MC 5 | 14.8 | MC 5 | MC 5 | 13.9 | FC 5 | FC 5 | FC 5 | FC 5 | 16.4 | 13.3 | 13.9 | | | | |
| 16626 | MC 5 | 16.6 | 16.2 | 16.9 | 17.7 | MC 5 | FC 5 | FC 5 | 15.3 | 16.9 | FC 5 | FC 5 | 16.0 | FC 5 | FC 5 | 16.0 | | | | |
| 16629 | 14.8 | 16.1 | 15.1 | MC 5 | MC 5 | 14.7 | MC 5 | MC 5 | 14.7 | FC 5 | 14.4 | FC 5 | 15.7 | FC 5 | 16.1 | FC 5 | FC 5 | | | |
| 16630 | 17.5 | 17.6 | 19.0 | MC 5 | MC 5 | 18.1 | FC 5 | 16.4 | 17.3 | FC 5 | 16.7 | 17.3 | FC 5 | | | | | | | |
| 16631 | 21.0 | MC 5 | 20.1 | 12.4 | 18.1 | MC 5 | FC 5 | FC 5 | 17.3 | FC 5 | FC 5 | 18.8 | FC 5 | FC 5 | FC 5 | 16.9 | 18.9 | | | |
| 16634 | MC 5 | MC 5 | MC 5 | 15.2 | 17.2 | 15.2 | 16.1 | MC 5 | 17.1 | MC 5 | FC 5 | 15.9 | 15.6 | 15.2 | | | | | | |
| 16635 | 19.1 | MC 5 | 17.8 | 19.5 | FC 5 | 19.0 | 16.4 | 17.7 | 18.7 | 17.9 | FC 5 | FS | | | | | | | | |
| 16636 | MC 5 | MC 5 | 14.7 | MC 5 | 14.4 | 14.4 | MC 5 | MC 5 | 14.3 | MC 5 | 14.8 | 11.6 | FC 5 | 13.5 | 14.1 | FD 2 | | | | |
| 16637 | MC 5 | 8.9 | 12.6 | MM 5 | 11.1 | MC 5 | MC 5 | 11.6 | MC 5 | 8.6 | FC 5 | FD 5 | 12.7 | 10.7 | 11.5 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 17): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | POSTPARTUM DAY 8 | | | | | | | |
| 16640 | MC 5 | 15.8 | 14.8 | 17.3 | MC 5 | MC 5 | 14.4 | 14.9 | FC 5 | 13.8 | 15.1 | FC 5 | FC 5 | FC 5 | 15.6 | | | | | |
| 16641 | MC 5 | MC 5 | 17.0 | MC 5 | 17.4 | MC 5 | 13.9 | 16.2 | 17.2 | FC 5 | 15.3 | 15.3 | FC 5 | 17.2 | FC 5 | | | | | |
| 16643 | 16.5 | 15.5 | 13.7 | 16.4 | MC 5 | MC 5 | 10.3 | 10.8 | 10.1 | FC 5 | FC 5 | 11.6 | | | | | | | | |
| 16644 | MC 5 | MC 5 | MC 5 | 8.3 | 10.3 | MC 5 | 15.3 | MC 5 | MC 5 | 10.3 | 9.8 | 9.0 | FC 5 | FC 5 | 14.7 | 9.1 | FD 2 | FD 2 | FS | |
| 16645 | 16.7 | 15.8 | MC 5 | 13.8 | MC 5 | 17.4 | MC 5 | MM 2 | 16.2 | 14.3 | FC 5 | FC 5 | 14.6 | 15.8 | | | | | | |
| 16646 | 16.6 | MC 5 | MC 5 | 16.4 | 15.9 | 16.4 | MC 5 | 14.4 | FC 5 | 14.9 | FC 5 | FC 5 | 14.8 | 15.6 | FC 5 | | | | | |
| 16647 | MC 5 | 17.3 | 12.4 | 17.6 | 10.8 | MM 2 | 16.5 | FC 5 | FC 5 | FC 5 | 14.8 | 14.2 | 13.4 | FM 3 | | | | | | |
| 16649 | 13.6 | 11.3 | MD 5 | MC 5 | MC 5 | 11.7 | MC 5 | 14.8 | MC 5 | FC 5 | 10.8 | 13.8 | 11.6 | 11.8 | FM 5 | FC 5 | FC 5 | | | |
| 16650 | 16.3 | MC 5 | 16.1 | MC 5 | MC 5 | MC 5 | 15.6 | 16.4 | MM 2 | FC 5 | FC 5 | FC 5 | 14.9 | FC 5 | FC 5 | 14.3 | 15.2 | 13.6 | | |
| 16651 | MC 5 | MC 5 | 14.9 | 13.4 | 16.5 | MC 5 | 16.1 | FC 5 | 14.7 | 13.8 | 11.0 | FC 5 | FC 5 | FC 5 | 15.2 | | | | | |
| 16653 | 17.0 | 15.9 | 16.8 | 17.5 | MC 5 | FC 5 | FC 5 | 15.1 | 16.4 | FC 5 | 13.2 | 16.2 | | | | | | | | |
| 16654 | 7.4 | 8.7 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 12.7 | 10.0 | MC 5 | 11.1 | FC 5 | 10.7 | 15.1 | 8.3 | | | | |
| 16655 | MC 5 | 16.0 | 15.0 | MC 5 | 15.8 | MC 5 | MC 5 | 16.0 | 15.0 | FC 5 | 17.7 | FC 5 | FC 5 | FC 5 | 14.1 | 14.1 | | | | |
| 16656 | 17.4 | MC 5 | 12.8 | 12.1 | 12.7 | 12.0 | 16.5 | 16.5 | 16.2 | FC 5 | FC 5 | FC 5 | FC 5 | | | | | | | |
| 16657 | MC 5 | MC 5 | MC 5 | 18.6 | MC 5 | 10.5 | MC 5 | 12.2 | MC 5 | MC 5 | 18.8 | 16.5 | FC 5 | 18.8 | 12.8 | 15.2 | FC 5 | | | |
| 16659 | 8.9 | 10.7 | MC 5 | 12.3 | FC 5 | 14.9 | 10.2 | 13.0 | FC 5 | 8.9 | FC 5 | 8.4 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 18): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | | POSTPARTUM DAY 8 | | | | | | |
| 16662 | 16.1 | 15.6 | MC 5 | MC 5 | 16.3 | 16.0 | FC 5 | FC 5 | 14.8 | FC 5 | FC 5 | 13.3 | 15.3 | 14.6 | | | | | | |
| 16664 | MC 5 | 12.3 | 13.6 | 12.0 | MC 5 | MC 5 | MC 5 | MC 5 | 12.0 | MC 5 | FC 5 | 13.1 | 12.1 | 11.6 | 10.1 | | | | | |
| 16665 | MC 5 | MC 5 | MC 5 | MC 5 | 13.4 | 14.5 | 13.2 | 14.7 | 12.6 | FC 5 | 12.8 | 12.8 | 11.6 | FC 5 | FC 5 | | | | | |
| 16666 | MC 5 | MC 5 | 13.7 | MC 5 | 16.5 | 15.6 | 14.6 | MC 5 | FC 5 | FC 5 | 16.7 | FC 5 | 17.3 | 16.4 | 15.6 | FU | | | | |
| 16667 | MC 5 | 14.6 | 14.5 | FC 5 | FC 5 | 13.9 | FC 5 | 15.2 | 15.0 | 14.6 | 14.5 | FC 5 | FC 5 | 14.1 | | | | | | |
| 16668 | 16.8 | 15.9 | 17.1 | 17.1 | MC 5 | MC 5 | 16.3 | 15.6 | 17.7 | FC 5 | FC 5 | 16.3 | FC 5 | FC 5 | | | | | | |
| 16669 | 14.1 | 14.6 | 15.4 | MC 5 | MC 5 | MC 5 | 10.8 | MC 5 | 14.5 | FC 5 | FC 5 | 15.6 | 15.7 | FC 5 | FC 5 | 16.0 | FD 2 | | | |
| 16670 | 10.3 | MC 5 | MC 5 | MC 5 | MC 5 | 10.3 | 9.1 | MC 5 | 9.0 | 10.5 | FC 5 | 9.6 | 9.3 | 11.0 | | | | | | |
| 16673 | 13.9 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 12.9 | 13.3 | 13.6 | 13.9 | 11.0 | FC 5 | 12.5 | 13.3 | | | | | |
| 16675 | 13.5 | 13.8 | MC 5 | 13.7 | 14.2 | MC 5 | 13.5 | FC 5 | 14.7 | 12.9 | 12.9 | FC 5 | FC 5 | FC 5 | FS | | | | | |
| 16676 | MC 5 | 16.7 | 16.0 | MC 5 | MC 5 | MC 5 | 14.2 | 14.3 | MC 5 | MC 5 | MC 5 | MD 1 | FC 5 | 13.5 | 14.3 | 14.7 | FC 5 | 7.3 | | |
| 16678 | 8.2 | MC 5 | 16.2 | 14.9 | 11.3 | MD 1 | FC 5 | 13.5 | FC 5 | FC 5 | 14.7 | 11.4 | 10.7 | FC 5 | FM 2 | | | | | |
| 16679 | MC 5 | MC 5 | MC 5 | 12.5 | 14.8 | 18.7 | 19.5 | MC 5 | MC 5 | 17.5 | 16.9 | FC 5 | 16.7 | FC 5 | 17.9 | | | | | |
| 16680 | MC 5 | 14.0 | 14.7 | 13.9 | 9.9 | MC 5 | MS | FC 5 | FC 5 | 14.1 | FC 5 | 15.3 | 13.2 | 13.4 | FC 5 | | | | | |
| 16681 | 9.1 | 11.2 | 13.0 | MD 5 | MM 7 | MC 5 | MD 1 | FD 5 | 13.1 | FD 5 | 12.3 | 13.0 | FC 5 | 10.1 | FC 5 | FD 4 | | | | |
| 16683 | MM 5 | 13.1 | MM 5 | 7.5 | MC 5 | MD 5 | 11.4 | 12.4 | FC 5 | 13.3 | 9.7 | 11.1 | FC 5 | FC 5 | 11.0 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 19): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | POSTPARTUM DAY 8 | | | | | | | |
| 16685 | MC 5 | MC 5 | 16.3 | MC 5 | MC 5 | 17.5 | 19.4 | 18.7 | 15.4 | FC 5 | 13.3 | FC 5 | 16.3 | 16.3 | | | | | | |
| 16686 | 14.3 | 17.0 | 16.1 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 17.1 | FC 5 | FC 5 | 16.7 | FC 5 | FC 5 | 16.1 | 14.2 | 13.5 | | |
| 16687 | 17.6 | MC 5 | 16.1 | MC 5 | 18.5 | 17.6 | 16.8 | MC 5 | 17.8 | FC 5 | 16.0 | 17.1 | FM 2 | | | | | | | |
| 16688 | MC 5 | MC 5 | 13.8 | MC 5 | 15.3 | MC 5 | 7.7 | MC 5 | 14.8 | FC 5 | FC 5 | FC 5 | 13.4 | FC 5 | FC 5 | 13.3 | 14.4 | 11.8 | | |
| 16689 | 17.0 | 12.5 | MC 5 | 16.2 | 15.8 | FC 5 | FC 5 | FC 5 | FC 5 | 15.9 | FC 5 | 15.8 | FC 5 | FC 5 | FC 5 | 14.0 | 12.9 | | | |
| 16690 | MC 5 | MC 5 | MC 5 | 13.8 | MC 5 | 14.5 | 11.9 | MC 5 | MC 5 | 11.5 | 12.4 | 12.2 | FC 5 | FC 5 | 12.2 | FM 5 | 13.1 | FC 5 | FC 5 | |
| 16692 | 18.5 | MC 5 | 17.2 | 17.6 | 13.2 | 16.0 | 12.5 | 9.7 | FC 5 | 14.4 | | | | | | | | | | |
| 16693 | MC 5 | MC 5 | 15.6 | MC 5 | MC 5 | 17.6 | 16.6 | 15.2 | FC 5 | 16.2 | 17.0 | 13.8 | 16.2 | | | | | | | |
| 16695 | MC 5 | MC 5 | MC 5 | 15.6 | MC 5 | 14.7 | 16.8 | 16.1 | 15.6 | FC 5 | 14.7 | 15.8 | FC 5 | FC 5 | 15.8 | | | | | |
| 16696 | MC 5 | 8.6 | 15.4 | 10.0 | MC 5 | 14.9 | FC 5 | 14.4 | 11.0 | 15.5 | FC 5 | FC 5 | FC 5 | FM 7 | FM 2 | | | | | |
| 16697 | 18.6 | MC 5 | 18.9 | MC 5 | MC 5 | MC 5 | 18.7 | 17.3 | 18.0 | 17.6 | 17.6 | 19.0 | FC 5 | | | | | | | |
| 16698 | 14.2 | MC 5 | 14.3 | MC 5 | MC 5 | MC 5 | 13.3 | MC 5 | 16.9 | MM 2 | MD 1 | FC 5 | FC 5 | 13.8 | 13.3 | FC 5 | 13.4 | 13.9 | | |
| 16699 | 16.9 | 15.7 | 16.6 | MC 5 | 15.9 | MD 1 | MD 1 | FC 5 | FC 5 | FC 5 | FC 5 | 17.1 | FC 5 | 17.2 | FC 5 | FC 5 | FC 5 | 15.9 | 15.5 | |
| 16701 | 14.5 | MC 5 | MC 5 | 15.0 | 14.6 | 13.6 | FC 5 | 13.9 | FC 5 | FC 5 | FC 5 | 15.1 | 14.6 | 13.2 | FC 5 | | | | | |
| 16706 | MC 5 | MC 5 | 16.6 | MC 5 | MC 5 | 17.6 | 17.2 | 17.7 | MC 5 | 10.2 | FC 5 | FC 5 | 12.9 | FC 5 | 7.6 | 7.9 | | | | |
| 16707 | 12.6 | 11.5 | 11.4 | 13.5 | MC 5 | 15.2 | FC 5 | 14.3 | FC 5 | 14.0 | 10.5 | FC 5 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 20): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | POSTPARTUM DAY 8 | | | | | | |
| 16708 | MC 5 | 13.9 | 14.2 | 14.5 | 12.7 | MC 5 | 12.5 | FC 5 | FC 5 | 13.7 | 12.7 | 14.4 | FC 5 | FC 5 | | | | | | |
| 16709 | MC 5 | 9.6 | MC 5 | MC 5 | 16.3 | 14.1 | MC 5 | 7.2 | 15.3 | FC 5 | 14.8 | FC 5 | 15.6 | FC 5 | 13.7 | FC 5 | | | | |
| 16711 | MC 5 | MC 5 | MC 5 | 11.8 | 14.3 | 13.2 | 12.6 | MC 5 | MC 5 | 12.9 | MC 5 | MC 5 | FC 5 | 14.2 | 10.1 | 13.5 | FD 5 | | | |
| 16712 | MC 5 | 15.9 | MC 5 | 19.2 | 16.6 | 16.3 | 10.5 | MC 5 | 14.6 | FC 5 | 17.2 | 17.5 | | | | | | | | |
| 16713 | 14.3 | 14.8 | 15.0 | MC 5 | 15.5 | FC 5 | 15.2 | FC 5 | 15.4 | 15.8 | 15.0 | FC 5 | | | | | | | | |
| 16715 | MC 5 | 16.1 | 16.1 | 16.6 | MC 5 | 16.0 | MC 5 | 16.8 | FC 5 | 15.7 | FC 5 | 14.8 | 15.0 | FC 5 | | | | | | |
| 16716 | 14.9 | MC 5 | 16.0 | MC 5 | MC 5 | 14.6 | 9.3 | MC 5 | 14.6 | FC 5 | 13.0 | FC 5 | 13.9 | 12.6 | FC 5 | FC 5 | | | | |
| 16717 | MC 5 | MC 5 | MC 5 | 12.8 | 15.9 | MC 5 | 16.0 | MC 5 | MC 5 | 14.2 | 14.0 | 13.9 | FC 5 | FC 5 | 16.4 | FC 5 | 16.4 | FC 5 | FC 5 | |
| 16718 | MC 5 | MC 5 | 13.0 | 13.5 | 13.0 | MC 5 | 14.5 | MS | 13.5 | 12.7 | FC 5 | 11.9 | FC 5 | 5.7 | FC 5 | FC 5 | | | | |
| 16719 | 15.1 | 15.1 | MC 5 | MC 5 | 15.7 | MC 5 | MC 5 | MC 5 | 17.3 | 14.6 | 16.1 | 14.9 | FC 5 | 12.7 | | | | | | |
| 16722 | 15.1 | 16.4 | 15.0 | MC 5 | 14.2 | MC 5 | MC 5 | MC 5 | 17.3 | 15.3 | 15.6 | FC 5 | 16.3 | FD 4 | | | | | | |
| 16723 | MC 5 | 17.0 | 19.0 | MC 5 | 18.1 | MC 5 | 16.9 | FC 5 | 14.4 | 18.3 | FC 5 | 16.8 | 17.9 | | | | | | | |
| 16724 | MC 5 | MC 5 | 14.2 | 8.9 | 9.4 | 12.7 | FC 5 | 13.4 | FC 5 | 11.9 | 12.4 | 12.9 | FC 5 | FC 5 | | | | | | |
| 16725 | MC 5 | MC 5 | 16.1 | MC 5 | 15.0 | 13.5 | MC 5 | MC 5 | MC 5 | 13.9 | MS | 13.4 | 11.7 | FC 5 | 14.2 | 14.2 | FS | | | |
| 16728 | 14.5 | MC 5 | 14.2 | 11.8 | 13.3 | FC 5 | FC 5 | FC 5 | FC 5 | 14.2 | FC 5 | FC 5 | 13.8 | 14.9 | 13.4 | FC 5 | | | | |
| 16730 | MC 5 | 19.7 | 21.9 | MC 5 | 19.8 | MC 5 | 19.0 | MC 5 | FC 5 | 18.9 | 13.7 | 19.2 | FC 5 | FC 5 | 19.0 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 21): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | POSTPARTUM DAY 10 | | | | | | |
| 16616 | 21.0 | 21.0 | 20.5 | 17.9 | MC 5 | FC 5 | 21.6 | 22.1 | FC 5 | FC 5 | 19.9 | 20.4 | FC 5 | FC 5 | | | | | | |
| 16617 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 21.7 | 15.7 | 20.9 | MD 6 | FC 5 | FC 5 | 20.3 | 14.5 | 18.6 | FC 5 | 18.2 | FC 5 | FC 5 | FD 2 | |
| 16618 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 18.2 | MC 5 | 23.5 | MC 5 | 20.9 | MC 5 | 18.0 | MC 5 | MC 5 | MC 5 | 21.5 | FC 5 | 18.0 | FC 5 | 21.1 |
| | 16.0 | FM 2 | | | | | | | | | | | | | | | | | | |
| 16619 | 20.8 | MC 5 | 21.0 | MC 5 | MC 5 | MC 5 | MC 5 | 21.1 | 21.7 | FC 5 | 21.0 | 19.8 | 20.3 | 19.7 | | | | | | |
| 16620 | MC 5 | 20.3 | 19.7 | FC 5 | 18.6 | 19.2 | 20.7 | FC 5 | 19.5 | FC 5 | FC 5 | 20.2 | 15.8 | | | | | | | |
| 16621 | MC 5 | 18.1 | 16.6 | 17.9 | 18.1 | FC 5 | FC 5 | 18.7 | 18.1 | FC 5 | FC 5 | 16.3 | FC 5 | FC 5 | 17.8 | | | | | |
| 16623 | MC 5 | MC 5 | MC 5 | MC 5 | 23.2 | MC 5 | 21.7 | MC 5 | 18.9 | 21.1 | FC 5 | 21.4 | FC 5 | 22.2 | 20.2 | 20.9 | FC 5 | | | |
| 16625 | MC 5 | 18.8 | 18.6 | 21.2 | MC 5 | 20.1 | MC 5 | MC 5 | 21.2 | FC 5 | FC 5 | FC 5 | FC 5 | 18.1 | 17.4 | 18.5 | | | | |
| 16626 | MC 5 | 21.3 | 22.4 | 20.6 | 20.5 | MC 5 | FC 5 | FC 5 | 18.9 | 21.5 | FC 5 | FC 5 | 18.7 | FC 5 | FC 5 | 19.6 | | | | |
| 16629 | 18.8 | 18.4 | 18.6 | MC 5 | MC 5 | 20.1 | MC 5 | MC 5 | 18.0 | FC 5 | 18.2 | FC 5 | 20.1 | FC 5 | 19.6 | FC 5 | FC 5 | | | |
| 16630 | 23.2 | 22.6 | 22.4 | MC 5 | MC 5 | 24.0 | FC 5 | 21.1 | 20.8 | FC 5 | 22.0 | 22.2 | FC 5 | | | | | | | |
| 16631 | 15.7 | MC 5 | 23.8 | 21.9 | 26.3 | MC 5 | FC 5 | FC 5 | 21.8 | FC 5 | FC 5 | 23.4 | FC 5 | FC 5 | FC 5 | 23.2 | 21.2 | | | |
| 16634 | MC 5 | MC 5 | MC 5 | 22.3 | 21.6 | 19.5 | 19.4 | MC 5 | 20.2 | MC 5 | FC 5 | 19.8 | 20.4 | 19.5 | | | | | | |
| 16635 | 24.0 | MC 5 | 24.2 | 22.7 | FC 5 | 22.6 | 23.1 | 20.9 | 23.8 | 23.1 | FC 5 | FS | | | | | | | | |
| 16636 | MC 5 | MC 5 | 18.8 | MC 5 | 18.2 | 18.0 | MC 5 | MC 5 | 18.7 | MC 5 | 18.0 | 18.2 | FC 5 | 15.2 | 17.2 | FD 2 | | | | |
| 16637 | MC 5 | 13.5 | 9.5 | MM 5 | 13.6 | MC 5 | MC 5 | 13.6 | MC 5 | 15.0 | FC 5 | FD 5 | 14.1 | 13.0 | 9.2 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 22): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | POSTPARTUM DAY 10 | | | | | | | |
| 16640 | MC 5 | 17.2 | 21.0 | 19.5 | MC 5 | MC 5 | 17.9 | 19.1 | FC 5 | 18.6 | 16.7 | FC 5 | FC 5 | FC 5 | 18.2 | | | | | |
| 16641 | MC 5 | MC 5 | 20.8 | MC 5 | 21.7 | MC 5 | 18.0 | 22.2 | 21.8 | FC 5 | 19.8 | 22.3 | FC 5 | 20.0 | FC 5 | | | | | |
| 16643 | 16.4 | 20.6 | 20.8 | 19.9 | MC 5 | MC 5 | 12.1 | 12.1 | 13.6 | FC 5 | FC 5 | 12.6 | | | | | | | | |
| 16644 | MC 5 | MC 5 | MC 5 | 14.3 | 11.2 | MC 5 | 20.6 | MC 5 | MC 5 | 12.8 | 20.2 | 11.5 | FC 5 | FC 5 | 11.2 | 11.7 | FD 2 | FD 2 | FS | |
| 16645 | 17.2 | 20.9 | MC 5 | 21.3 | MC 5 | 20.6 | MC 5 | MM 2 | 20.8 | 16.9 | FC 5 | FC 5 | 18.1 | 19.7 | | | | | | |
| 16646 | 20.4 | MC 5 | MC 5 | 20.8 | 19.8 | 19.9 | MC 5 | 19.5 | FC 5 | 18.3 | FC 5 | FC 5 | 18.8 | 18.5 | FC 5 | | | | | |
| 16647 | MC 5 | 21.9 | 21.9 | 14.2 | 16.3 | MM 2 | 19.2 | FC 5 | FC 5 | FC 5 | 20.7 | 17.3 | 18.8 | FM 3 | | | | | | |
| 16649 | 15.6 | 17.8 | MD 5 | MC 5 | MC 5 | 18.5 | MC 5 | 15.3 | MC 5 | FC 5 | 18.0 | 16.2 | 15.2 | 14.2 | FM 5 | FC 5 | FC 5 | | | |
| 16650 | 20.1 | MC 5 | 20.6 | MC 5 | MC 5 | MC 5 | 31.3 | 20.6 | MM 2 | FC 5 | FC 5 | FC 5 | 18.2 | FC 5 | FC 5 | 19.5 | 17.8 | 19.0 | | |
| 16651 | MC 5 | MC 5 | 17.7 | 21.0 | 21.0 | MC 5 | 16.6 | FC 5 | 13.8 | 19.2 | 16.8 | FC 5 | FC 5 | FC 5 | 19.4 | | | | | |
| 16653 | 20.7 | 21.1 | 19.9 | 21.3 | MC 5 | FC 5 | FC 5 | 20.6 | 18.6 | FC 5 | 20.3 | 16.8 | | | | | | | | |
| 16654 | 11.2 | 16.1 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 9.6 | 12.5 | MC 5 | 14.5 | FC 5 | 19.6 | 10.6 | 13.8 | | | | |
| 16655 | MC 5 | 20.3 | 18.8 | MC 5 | 20.0 | MC 5 | MC 5 | 19.9 | 17.6 | FC 5 | 19.1 | FC 5 | FC 5 | FC 5 | 22.1 | 17.8 | | | | |
| 16656 | 16.4 | MC 5 | 16.3 | 21.8 | 21.1 | 15.8 | 20.7 | 17.3 | 19.7 | FC 5 | FC 5 | FC 5 | FC 5 | | | | | | | |
| 16657 | MC 5 | MC 5 | MC 5 | 24.3 | MC 5 | 24.0 | MC 5 | 13.8 | MC 5 | MC 5 | 16.2 | 24.0 | FC 5 | 16.4 | 20.2 | 20.2 | FC 5 | | | |
| 16659 | 15.6 | 14.0 | MC 5 | 12.1 | FC 5 | 12.8 | 18.5 | 11.3 | FC 5 | 16.3 | FC 5 | 11.4 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 23): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | | POSTPARTUM DAY 10 | | | | | | |
| 16662 | 19.7 | 19.3 | MC 5 | MC 5 | 19.9 | 21.2 | FC 5 | FC 5 | 19.2 | FC 5 | FC 5 | 17.2 | 18.3 | 18.7 | | | | | | |
| 16664 | MC 5 | 17.0 | 14.2 | 15.0 | MC 5 | MC 5 | MC 5 | MC 5 | 14.6 | MC 5 | FC 5 | 16.3 | 15.0 | 12.4 | 14.7 | | | | | |
| 16665 | MC 5 | MC 5 | MC 5 | MC 5 | 16.8 | 17.2 | 15.9 | 15.5 | 15.4 | FC 5 | 15.2 | 14.2 | 14.3 | FC 5 | FC 5 | | | | | |
| 16666 | MC 5 | MC 5 | 17.4 | MC 5 | 19.5 | 20.8 | 17.1 | MC 5 | FC 5 | FC 5 | 19.3 | FC 5 | 21.7 | 20.7 | 21.3 | FU | | | | |
| 16667 | MC 5 | 18.4 | 18.2 | FC 5 | FC 5 | 17.3 | FC 5 | 18.4 | 18.6 | 18.2 | 17.6 | FC 5 | FC 5 | 18.8 | | | | | | |
| 16668 | 21.0 | 19.6 | 21.5 | 21.2 | MC 5 | MC 5 | 22.0 | 20.2 | 20.4 | FC 5 | FC 5 | 19.4 | FC 5 | FC 5 | | | | | | |
| 16669 | 14.9 | 19.7 | 17.9 | MC 5 | MC 5 | MC 5 | 19.2 | MC 5 | 19.5 | FC 5 | FC 5 | 20.2 | 19.2 | FC 5 | FC 5 | 20.2 | FD 2 | | | |
| 16670 | 13.7 | MC 5 | MC 5 | MC 5 | MC 5 | 13.9 | 12.4 | MC 5 | 12.3 | 14.9 | FC 5 | 14.1 | 12.8 | 13.1 | | | | | | |
| 16673 | 18.2 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 17.7 | 17.1 | 16.8 | 17.9 | 16.6 | FC 5 | 14.5 | 17.0 | | | | | |
| 16675 | 19.3 | 18.0 | MC 5 | 18.0 | 17.1 | MC 5 | 18.9 | FC 5 | 16.9 | 17.5 | 18.0 | FC 5 | FC 5 | FC 5 | FS | | | | | |
| 16676 | MC 5 | 18.4 | 22.1 | MC 5 | MC 5 | MC 5 | 20.4 | 18.8 | MC 5 | MC 5 | MC 5 | MD 1 | FC 5 | 17.7 | 19.4 | 18.4 | FC 5 | 9.2 | | |
| 16678 | 20.9 | MC 5 | 19.0 | 15.1 | 10.4 | MD 1 | FC 5 | 17.1 | FC 5 | FC 5 | 19.1 | 15.1 | 14.3 | FC 5 | FM 2 | | | | | |
| 16679 | MC 5 | MC 5 | MC 5 | 23.4 | 19.0 | 23.9 | 16.9 | MC 5 | MC 5 | 21.2 | 21.2 | FC 5 | 20.9 | FC 5 | 22.3 | | | | | |
| 16680 | MC 5 | 12.8 | 18.4 | 17.7 | 17.9 | MC 5 | MS | FC 5 | FC 5 | 17.6 | FC 5 | 17.5 | 19.0 | 16.6 | FC 5 | | | | | |
| 16681 | 13.1 | 11.6 | 16.1 | MD 5 | MM 7 | MC 5 | MD 1 | 16.9 | 16.4 | FD 5 | 15.8 | 13.1 | FC 5 | 16.7 | FC 5 | FD 4 | | | | |
| 16683 | MM 5 | 15.6 | MM 5 | 16.6 | MC 5 | MD 5 | 17.1 | 9.7 | FC 5 | 14.1 | 12.6 | 14.4 | FC 5 | FC 5 | 17.3 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 24): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | POSTPARTUM DAY 10 | | | | | | | |
| 16685 | MC 5 | MC 5 | 24.4 | MC 5 | MC 5 | 20.8 | 22.2 | 23.4 | 21.1 | FC 5 | 20.3 | FC 5 | 21.0 | 16.8 | | | | | | |
| 16686 | 21.6 | 21.1 | 20.5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | 18.3 | FC 5 | FC 5 | 20.1 | FC 5 | FC 5 | 21.0 | 17.6 | 18.2 | | |
| 16687 | 21.6 | MC 5 | 23.1 | MC 5 | 21.9 | 20.8 | 22.1 | MC 5 | 21.1 | FC 5 | 20.5 | 21.6 | FM 2 | | | | | | | |
| 16688 | MC 5 | MC 5 | 17.9 | MC 5 | 15.7 | MC 5 | 18.9 | MC 5 | 18.0 | FC 5 | FC 5 | FC 5 | 20.0 | FC 5 | FC 5 | 19.3 | 18.3 | 10.4 | | |
| 16689 | 19.7 | 15.5 | MC 5 | 21.1 | 19.5 | FC 5 | FC 5 | FC 5 | FC 5 | 16.2 | FC 5 | 19.8 | FC 5 | FC 5 | FC 5 | 16.9 | 20.0 | | | |
| 16690 | MC 5 | MC 5 | MC 5 | 14.8 | MC 5 | 14.8 | 17.8 | MC 5 | MC 5 | 17.9 | 16.4 | 15.8 | FC 5 | FC 5 | 14.8 | FM 5 | 15.1 | FC 5 | FC 5 | |
| 16692 | 23.5 | MC 5 | 16.7 | 21.8 | 22.5 | 19.7 | 12.1 | 15.9 | FC 5 | 18.7 | | | | | | | | | | |
| 16693 | MC 5 | MC 5 | 22.4 | MC 5 | MC 5 | 19.7 | 19.7 | 21.2 | FC 5 | 21.5 | 18.8 | 21.5 | 20.8 | | | | | | | |
| 16695 | MC 5 | MC 5 | MC 5 | 20.8 | MC 5 | 21.5 | 20.5 | 19.3 | 19.0 | FC 5 | 20.3 | 19.6 | FC 5 | FC 5 | 20.5 | | | | | |
| 16696 | MC 5 | 19.5 | 19.6 | 11.3 | MC 5 | 10.5 | FC 5 | 18.9 | 14.9 | 20.1 | FC 5 | FC 5 | FC 5 | FM 7 | FM 2 | | | | | |
| 16697 | 23.1 | MC 5 | 21.7 | MC 5 | MC 5 | MC 5 | 22.7 | 22.1 | 23.6 | 21.9 | 21.8 | 23.0 | FC 5 | | | | | | | |
| 16698 | 21.6 | MC 5 | 18.1 | MC 5 | MC 5 | MC 5 | 18.0 | MC 5 | 18.8 | MM 2 | MD 1 | FC 5 | FC 5 | 18.1 | 18.0 | FC 5 | 17.2 | 17.2 | | |
| 16699 | 21.7 | 21.1 | 19.8 | MC 5 | 20.4 | MD 1 | MD 1 | FC 5 | FC 5 | FC 5 | FC 5 | 20.5 | FC 5 | 19.8 | FC 5 | FC 5 | FC 5 | 21.5 | 21.4 | |
| 16701 | 18.9 | MC 5 | MC 5 | 18.9 | 17.6 | 17.5 | FC 5 | 17.2 | FC 5 | FC 5 | FC 5 | 19.4 | 17.0 | 18.7 | FC 5 | | | | | |
| 16706 | MC 5 | MC 5 | 22.3 | MC 5 | MC 5 | 21.7 | 22.7 | 20.7 | MC 5 | 14.0 | FC 5 | FC 5 | 9.5 | FC 5 | 17.0 | 10.4 | | | | |
| 16707 | 16.3 | 14.6 | 15.5 | 14.2 | MC 5 | 17.0 | FC 5 | 18.4 | FC 5 | 13.3 | 17.2 | FC 5 | FC 5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C40 (PAGE 25): PUP BODY WEIGHTS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | POSTPARTUM DAY 10 | | | | | | |
| 16708 | MC 5 | 16.7 | 19.0 | 17.8 | 18.4 | MC 5 | 16.3 | FC 5 | FC 5 | 18.5 | 18.0 | 16.3 | FC 5 | FC 5 | | | | | | |
| 16709 | MC 5 | 18.2 | MC 5 | MC 5 | 21.5 | 11.5 | MC 5 | 8.4 | 18.0 | FC 5 | 19.9 | FC 5 | 19.6 | FC 5 | 20.0 | FC 5 | | | | |
| 16711 | MC 5 | MC 5 | MC 5 | 17.0 | 17.2 | 19.6 | 16.7 | MC 5 | MC 5 | 17.5 | MC 5 | MC 5 | FC 5 | 18.4 | 17.7 | 13.6 | FD 5 | | | |
| 16712 | MC 5 | 21.7 | MC 5 | 20.5 | 13.4 | 24.5 | 21.0 | MC 5 | 19.1 | FC 5 | 22.3 | 21.9 | | | | | | | | |
| 16713 | 18.7 | 18.7 | 19.8 | MC 5 | 19.5 | FC 5 | 19.2 | FC 5 | 20.4 | 19.5 | 19.7 | FC 5 | | | | | | | | |
| 16715 | MC 5 | 18.9 | 19.2 | 19.0 | MC 5 | 19.8 | MC 5 | 18.4 | FC 5 | 18.5 | FC 5 | 20.8 | 19.1 | FC 5 | | | | | | |
| 16716 | 18.9 | MC 5 | 11.3 | MC 5 | MC 5 | 20.5 | 19.0 | MC 5 | 18.3 | FC 5 | 17.6 | FC 5 | 16.6 | 16.8 | FC 5 | FC 5 | | | | |
| 16717 | MC 5 | MC 5 | MC 5 | 20.0 | 19.9 | MC 5 | 16.3 | MC 5 | MC 5 | 18.3 | 20.0 | 17.1 | FC 5 | FC 5 | 16.7 | FC 5 | 19.6 | FC 5 | FC 5 | |
| 16718 | MC 5 | MC 5 | 17.2 | 17.2 | 19.2 | MC 5 | 17.5 | MS | 15.9 | 17.1 | FC 5 | 17.4 | FC 5 | 6.0 | FC 5 | FC 5 | | | | |
| 16719 | 21.5 | 19.8 | MC 5 | MC 5 | 19.4 | MC 5 | MC 5 | MC 5 | 18.8 | 16.3 | 18.4 | 19.9 | FC 5 | 18.8 | | | | | | |
| 16722 | 20.6 | 19.2 | 19.4 | MC 5 | 18.8 | MC 5 | MC 5 | MC 5 | 21.2 | 20.7 | 19.6 | FC 5 | 19.3 | FD 4 | | | | | | |
| 16723 | MC 5 | 23.2 | 22.5 | MC 5 | 23.9 | MC 5 | 22.0 | FC 5 | 18.4 | 23.8 | FC 5 | 22.0 | 23.3 | | | | | | | |
| 16724 | MC 5 | MC 5 | 10.0 | 18.4 | 16.2 | 10.4 | FC 5 | 16.1 | FC 5 | 16.5 | 15.1 | 17.2 | FC 5 | FC 5 | | | | | | |
| 16725 | MC 5 | MC 5 | 19.4 | MC 5 | 18.1 | 17.6 | MC 5 | MC 5 | MC 5 | 21.2 | MS | 17.7 | 15.5 | FC 5 | 18.8 | 18.1 | FS | | | |
| 16728 | 18.0 | MC 5 | 18.0 | 15.9 | 19.1 | FC 5 | FC 5 | FC 5 | FC 5 | 18.1 | FC 5 | FC 5 | 18.8 | 17.5 | 19.4 | FC 5 | | | | |
| 16730 | MC 5 | 28.0 | 25.2 | MC 5 | 25.0 | MC 5 | 25.5 | MC 5 | FC 5 | 17.7 | 24.3 | 23.7 | FC 5 | FC 5 | 24.3 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C41 (PAGE 1): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | | | | | | | |
| 16616 | M A | M A | M A | M A | MC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | | | | | | | | | |
| 16617 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | M A | MD 6 | FC 5 | FC 5 | F A | F A | F A | FC 5 | F A | FC 5 | FC 5 | FD 2 | | | | |
| 16618 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | F A | FC 5 | F A | FC 5 | F A | F A | FM 2 | |
| 16619 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | FC 5 | F A | F A | F A | F A | | | | | | | | | |
| 16620 | MC 5 | M A | M A | FC 5 | F A | F A | F A | FC 5 | F A | FC 5 | FC 5 | F A | F A | | | | | | | | | | |
| 16621 | MC 5 | M A | M A | M A | M A | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | | | | | | | | |
| 16623 | MC 5 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | M A | FC 5 | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | |
| 16625 | MC 5 | M A | M A | M A | MC 5 | M A | MC 5 | MC 5 | F A | FC 5 | FC 5 | FC 5 | FC 5 | F A | F A | F A | | | | | | | |
| 16626 | MC 5 | M A | M A | M A | M A | MC 5 | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | | | | | | | |
| 16629 | M A | M A | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | F A | FC 5 | F A | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | | | | | | |
| 16630 | M A | M A | M A | MC 5 | MC 5 | M A | FC 5 | F A | F A | FC 5 | F A | F A | FC 5 | | | | | | | | | | |
| 16631 | M A | MC 5 | M A | M A | M A | MC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | F A | | | | | | |
| 16634 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | MC 5 | M A | MC 5 | FC 5 | F A | F A | F A | | | | | | | | | |
| 16635 | M A | MC 5 | M A | M A | FC 5 | F A | F A | F A | F A | F A | FC 5 | F S | | | | | | | | | | | |
| 16636 | MC 5 | MC 5 | M A | MC 5 | M A | M A | MC 5 | MC 5 | M A | MC 5 | F A | F A | FC 5 | F A | F A | FD 2 | | | | | | | |
| 16637 | MC 5 | M A | M A | MM 5 | M A | MC 5 | MC 5 | M A | MC 5 | F A | FC 5 | FD 5 | F A | F A | F A | FC 5 | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C41 (PAGE 2): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | | | 0.01 MG/KG/DAY | | | | | | | | | | | | | | |
| 16640 | MC 5 | M A | M A | M A | MC 5 | MC 5 | M A | F A | FC 5 | F A | F A | FC 5 | FC 5 | FC 5 | F A | | | | | | | | |
| 16641 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | M A | F A | FC 5 | F A | F A | FC 5 | F A | FC 5 | | | | | | | | |
| 16643 | M A | M A | M A | M A | MC 5 | MC 5 | F A | F A | F A | FC 5 | FC 5 | F A | | | | | | | | | | | |
| 16644 | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | F A | F A | FC 5 | FC 5 | F A | F A | FD 2 | FD 2 | F S | | | | |
| 16645 | M A | M A | MC 5 | M A | MC 5 | M A | MC 5 | MM 2 | F A | F A | FC 5 | FC 5 | F A | F A | | | | | | | | | |
| 16646 | M A | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | FC 5 | F A | FC 5 | FC 5 | F A | F A | FC 5 | | | | | | | | |
| 16647 | MC 5 | M A | M A | M A | M A | MM 2 | F A | FC 5 | FC 5 | FC 5 | F A | F A | F A | FM 3 | | | | | | | | | |
| 16649 | M A | M A | MD 5 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | FC 5 | F A | F A | F A | F A | FM 5 | FC 5 | FC 5 | | | | | | |
| 16650 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | M A | MM 2 | FC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | | | | | |
| 16651 | MC 5 | MC 5 | M A | M A | M A | MC 5 | M A | FC 5 | F A | F A | F A | FC 5 | FC 5 | FC 5 | F A | | | | | | | | |
| 16653 | M A | M A | M A | M A | MC 5 | FC 5 | FC 5 | F A | F A | FC 5 | F A | F A | | | | | | | | | | | |
| 16654 | M A | M A | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | F A | FC 5 | F A | F A | F A | | | | | | | |
| 16655 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | F A | | | | | | | |
| 16656 | M A | MC 5 | M A | M A | F A | F A | F A | F A | F A | FC 5 | FC 5 | FC 5 | FC 5 | | | | | | | | | | |
| 16657 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | MC 5 | M A | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | |
| 16659 | M A | M A | MC 5 | M A | FC 5 | F A | F A | F A | FC 5 | F A | FC 5 | F A | FC 5 | | | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C41 (PAGE 3): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | | | 0.1 MG/KG/DAY | | | | | | | | | | | | | | |
| 16662 | M A | M A | MC 5 | MC 5 | M A | M A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | | | | | | | | | |
| 16664 | MC 5 | M A | M A | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | MC 5 | FC 5 | F A | F A | F A | F A | | | | | | | | |
| 16665 | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | F A | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | | |
| 16666 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | MC 5 | FC 5 | FC 5 | F A | FC 5 | F A | F A | F A | F U | | | | | | | |
| 16667 | MC 5 | M A | M A | FC 5 | FC 5 | F A | FC 5 | F A | F A | F A | F A | FC 5 | FC 5 | F A | | | | | | | | | |
| 16668 | M A | M A | M A | M A | MC 5 | MC 5 | F A | F A | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | | | | | | | | | |
| 16669 | M A | M A | M A | MC 5 | MC 5 | MC 5 | M A | MC 5 | F A | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | FD 2 | | | | | | |
| 16670 | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | M A | F A | FC 5 | F A | F A | F A | | | | | | | | | |
| 16673 | M A | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | F A | FC 5 | F A | F A | | | | | | | | |
| 16675 | M A | M A | MC 5 | M A | M A | MC 5 | F A | FC 5 | F A | F A | F A | FC 5 | FC 5 | FC 5 | F S | | | | | | | | |
| 16676 | MC 5 | M A | M A | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | MC 5 | MC 5 | MD 1 | FC 5 | F A | F A | F A | FC 5 | F A | | | | | |
| 16678 | M A | MC 5 | M A | M A | M A | MD 1 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | FC 5 | FM 2 | | | | | | | | |
| 16679 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | MC 5 | MC 5 | F A | F A | FC 5 | F A | FC 5 | F A | | | | | | | | |
| 16680 | MC 5 | M A | M A | M A | M A | MC 5 | M S | FC 5 | FC 5 | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | | | |
| 16681 | M A | M A | M A | MD 5 | MM 7 | MC 5 | MD 1 | FD 5 | F A | FD 5 | F A | F A | FC 5 | F A | FC 5 | FD 4 | | | | | | | |
| 16683 | MM 5 | M A | MM 5 | M A | MC 5 | MD 5 | M A | M A | FC 5 | F A | F A | F A | FC 5 | FC 5 | F A | FC 5 | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C41 (PAGE 4): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | | | 1.0 MG/KG/DAY | | | | | | | | | | | | | | |
| 16685 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | F A | FC 5 | F A | FC 5 | F A | F A | | | | | | | | | |
| 16686 | M A | M A | M A | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | MC 5 | M A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | | | | | |
| 16687 | M A | MC 5 | M A | MC 5 | M A | M A | M A | MC 5 | M A | FC 5 | F A | F A | FM 2 | | | | | | | | | | |
| 16688 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | FC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | | | | | |
| 16689 | M A | M A | MC 5 | M A | M A | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | F A | | | | | | |
| 16690 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | M A | MC 5 | MC 5 | M A | F A | F A | FC 5 | FC 5 | F A | FM 5 | F A | FC 5 | FC 5 | | | | |
| 16692 | M A | MC 5 | M A | M A | M A | F A | F A | F A | FC 5 | F A | | | | | | | | | | | | | |
| 16693 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | FC 5 | F A | F A | F A | F A | | | | | | | | | | |
| 16695 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | F A | FC 5 | F A | F A | FC 5 | FC 5 | F A | | | | | | | | |
| 16696 | MC 5 | M A | M A | M A | MC 5 | M A | FC 5 | F A | F A | F A | FC 5 | FC 5 | FC 5 | FM 7 | FM 2 | | | | | | | | |
| 16697 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | M A | F A | FC 5 | | | | | | | | | | |
| 16698 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | MM 2 | MD 1 | FC 5 | FC 5 | F A | F A | FC 5 | F A | F A | | | | | |
| 16699 | M A | M A | M A | MC 5 | M A | MD 1 | MD 1 | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | F A | | | | |
| 16701 | M A | MC 5 | MC 5 | M A | M A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | F A | F A | FC 5 | | | | | | | | |
| 16706 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | FC 5 | FC 5 | F A | FC 5 | F A | F A | | | | | | | |
| 16707 | M A | M A | M A | M A | MC 5 | F A | FC 5 | F A | FC 5 | F A | F A | FC 5 | FC 5 | | | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
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PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C41 (PAGE 5): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | | | 30.0 MG/KG/DAY | | | | | | | | | | | | | | |
| 16708 | MC 5 | M A | M A | M A | M A | MC 5 | F A | FC 5 | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | | | |
| 16709 | MC 5 | M A | MC 5 | MC 5 | M A | M A | MC 5 | M A | F A | FC 5 | F A | FC 5 | F A | FC 5 | F A | FC 5 | | | | | | | |
| 16711 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | FC 5 | F A | F A | F A | FD 5 | | | | | | |
| 16712 | MC 5 | M A | MC 5 | M A | M A | M A | M A | MC 5 | F A | FC 5 | F A | F A | | | | | | | | | | | |
| 16713 | M A | M A | M A | MC 5 | M A | FC 5 | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | | | | | | |
| 16715 | MC 5 | M A | M A | M A | MC 5 | M A | MC 5 | F A | FC 5 | F A | FC 5 | F A | F A | FC 5 | | | | | | | | | |
| 16716 | M A | MC 5 | M A | MC 5 | MC 5 | M A | M A | MC 5 | F A | FC 5 | F A | FC 5 | F A | F A | FC 5 | FC 5 | | | | | | | |
| 16717 | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | F A | F A | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | | | | |
| 16718 | MC 5 | MC 5 | M A | M A | M A | MC 5 | M A | M S | F A | F A | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | | | | | | | |
| 16719 | M A | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | F A | F A | F A | FC 5 | F A | | | | | | | | | |
| 16722 | M A | M A | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | F A | F A | FC 5 | F A | FD 4 | | | | | | | | | |
| 16723 | MC 5 | M A | M A | MC 5 | M A | MC 5 | M A | FC 5 | F A | F A | FC 5 | F A | F A | | | | | | | | | | |
| 16724 | MC 5 | MC 5 | M A | M A | M A | M A | FC 5 | F A | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | | | |
| 16725 | MC 5 | MC 5 | M A | MC 5 | M A | M A | MC 5 | MC 5 | MC 5 | M A | M S | F A | F A | FC 5 | F A | F A | F S | | | | | | |
| 16728 | M A | MC 5 | M A | M A | M A | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | FC 5 | | | | | | | |
| 16730 | MC 5 | M A | M A | MC 5 | M A | MC 5 | M A | MC 5 | FC 5 | F A | F A | F A | FC 5 | FC 5 | F A | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
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PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C42 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 10 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY(S) POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| I<br>0 (CARRIER) | - | - | - |
| II<br>0.01 | - | - | - |
| III<br>0.1 | 16668 | 1- 5 | 1/14 PUPS: TIP OF TAIL MISSING. |
| | | 6-10 | 1/ 8 PUPS: TIP OF TAIL MISSING. |
| | 16669 | 1 | 1/17 PUPS: COLD TO TOUCH. |
| | 16673 | 1- 5 | 1/15 PUPS: TIP OF TAIL BLACK.b |
| IV<br>1.0 | - | - | - |
| V<br>30.0 | 16713 | 1- 5 | 1/12 PUPS: LEFT HINDPAW, 4TH DIGIT MISSING.b |

a. Tabulation restricted to adverse observations; all other pups appeared normal.
b. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| I<br>0 (CARRIER) | 16616 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16617 | 2 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH.<br>ALL OTHER TISSUES APPEARED NORMAL. |
| | | 5 | ALL PUPS APPEARED NORMAL. |
| | | 6 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |
| | 16618 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16619 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16620 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16621 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16623 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16625 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16626 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16629 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16630 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16631 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16634 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16635 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16636 | 2 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH.<br>ALL OTHER TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16637 | 5 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| II<br>0.01 | 16640 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16641 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16643 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16644 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 2 | 2 PUPS: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16645 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16646 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16647 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16649 | 5 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |
| | 16650 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16651 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16653 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16654 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16655 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16656 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16657 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16659 | 5,10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| III | | | |
| 0.1 | 16662 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16664 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16665 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16666 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16667 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16668 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16669 | 2 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH.<br>ALL OTHER TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16670 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16673 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16675 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16676 | 1 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16678 | 1 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| III<br>0.1 | 16679 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16680 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16681 | 1 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 4 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 5 | 3 PUPS: FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |
| | 16683 | 5 | 1 PUP: FOUND DEAD. CANNIBALIZATION PRECLUDED FURTHER EVALUATION.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 5): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| IV<br>1.0 | 16685 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16686 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16687 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16688 | 5 | ALL PUPS APPEARED NORMAL. |
| | | 10 | 1 PUP: LIVER: MEDIAN LOBE, PALE, PEDUNICILATED AREA (0.2 CM X 0.3 CM X 0.4 CM). ALL OTHER TISSUES APPEARED NORMAL.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | 16689 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16690 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16692 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16693 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16695 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16696 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16697 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16698 | 1 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH.<br>ALL OTHER TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16699 | 1 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH.<br>ALL OTHER TISSUES APPEARED NORMAL.<br>1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16701 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16706 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16707 | 5,10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE C43 (PAGE 6): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART B

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| V<br>30.0 | 16708 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16709 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16711 | 5 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL.<br>ALL OTHER PUPS APPEARED NORMAL. |
| | | 10 | ALL PUPS APPEARED NORMAL. |
| | 16712 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16713 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16715 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16716 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16717 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16718 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16719 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16722 | 4 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16723 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16724 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16725 | 1 | 2 PUPS: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16728 | 5,10 | ALL PUPS APPEARED NORMAL. |
| | 16730 | 5,10 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C42) for external clinical observations confirmed at necropsy.

# APPENDIX D

## REPORT TABLES - PART C

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D1 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.08 ± 0.01 [ 21]a | 0.81 ± 0.12 | 24.52 ± 5.22 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 0.00 ± 0.00 [ 22]a | 0.01 ± 0.00 [ 22]a | 0.09 ± 0.02 | 0.75 ± 0.08 [ 20]a,c | 23.49 ± 3.36 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 0.00 ± 0.00 [ 22]a | 0.01 ± 0.00 [ 22]a | 0.09 ± 0.02 | 0.77 ± 0.09 [ 20]a,c | 23.59 ± 3.16 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.
c. Excludes values that were incorrectly recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D2 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 0.00 ± 0.00 [ 15]a | 0.01 ± 0.00 [ 14]a,b | 0.10 ± 0.02 [ 14]a | 0.89 ± 0.17 [ 15]a | 27.02 ± 3.06 [ 14]a |
| DAYS 6 - 9 | MEAN±S.D. | 0.00 ± 0.00 [ 15]a | 0.01 ± 0.00 [ 14]a | 0.09 ± 0.02 [ 14]a | 0.98 ± 0.25 | 27.07 ± 3.82 |
| DAYS 9 - 12 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 [ 12]a | 0.09 ± 0.01 [ 14]a | 0.98 ± 0.14 [ 14]a | 27.47 ± 4.51 [ 14]a |
| DAYS 12 - 15 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 [ 13]a | 0.08 ± 0.02 [ 12]a | 0.95 ± 0.19 [ 13]a | 28.17 ± 6.26 [ 14]a |
| DAYS 15 - 18 | MEAN±S.D. | 0.00 ± 0.00 [ 13]a | 0.01 ± 0.00 [ 12]a | 0.10 ± 0.01 [ 13]a | 0.98 ± 0.14 [ 15]a | 30.76 ± 5.30 [ 15]b |
| DAYS 18 - 20 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 | 0.08 ± 0.01 [ 12]a | 0.88 ± 0.80 [ 15]a | 27.03 ± 5.76 [ 15]a |
| DAYS 0 - 20 | MEAN±S.D. | 0.00 ± 0.00 [ 14]a | 0.01 ± 0.00 | 0.09 ± 0.01 [ 12]a | 0.94 ± 0.11 [ 15]a | 28.41 ± 4.10 [ 15]a |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D3 (PAGE 1): CONSUMED DOSAGES (MG/KG/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL CONSUMED DOSAGE (MG/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 0.00 ± 0.00 [ 15]a | 0.01 ± 0.00 [ 14]a | 0.11 ± 0.02 | 1.23 ± 0.19 | 37.06 ± 5.59 |
| DAYS 4 - 7 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 | 0.13 ± 0.02 [ 14]a | 1.29 ± 0.16 | 40.07 ± 5.11 |
| DAYS 7 - 14 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.14 ± 0.01 [ 14]a | 1.35 ± 0.16 | 41.02 ± 4.71 [ 15]b |
| DAYS 1 - 14 | MEAN±S.D. | 0.00 ± 0.00 | 0.01 ± 0.00 [ 15]a | 0.12 ± 0.01 [ 14]a | 1.26 ± 0.13 | 38.32 ± 4.60 [ 15]b |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D4 (PAGE 1): CLINICAL OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|
| PRECOHABITATION (DAY 1 OF STUDY TO THE DAY OF COHABITATION): | | | | | |
| MAXIMUM POSSIBLE INCIDENCE | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 | 322/ 23 |
| INCISORS: MISSING/BROKEN | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 4/ 1 |
| PRESUMED GESTATION: a | | | | | |
| MAXIMUM POSSIBLE INCIDENCE b | 463/ 22 | 463/ 21 | 472/ 22 | 508/ 23 | 494/ 22 |
| BACK: SCAB | 1/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| CHROMORHINORRHEA | 0/ 0 | 0/ 0 | 0/ 0 | 1/ 1 | 1/ 1 |
| CHROMODACRYORRHEA | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 1/ 1 |
| RIGHT EAR: TORN | 0/ 0 | 22/ 1 | 0/ 0 | 0/ 0 | 0/ 0 |
| LOCALIZED ALOPECIA: LIMBS | 17/ 1 | 16/ 1 | 12/ 1 | 0/ 0 | 16/ 1 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP.
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.
a. Restricted to rats with a confirmed mating date.
b. Includes all rats, regardless of pregnancy status and selection.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D4 (PAGE 2): CLINICAL OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | I | II | III | IV | V |
|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| LACTATION: | | | | | |
| MAXIMUM POSSIBLE INCIDENCE a | 435/ 20 | 462/ 21 | 378/ 19 | 461/ 22 | 417/ 20 |
| RIGHT EAR: TORN | 0/ 0 | 22/ 1 | 0/ 0 | 0/ 0 | 9/ 1 |
| INCISORS: MISSING/BROKEN | 2/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 5/ 1 |
| INCISORS: MISALIGNED | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 5/ 1 |
| LOCALIZED ALOPECIA: TOTAL | 48/ 2 | 22/ 1 | 16/ 1 | 0/ 0 | 15/ 1 |
| LIMBS | 35/ 2 | 22/ 1 | 16/ 1 | 0/ 0 | 15/ 1 |
| UNDERSIDE | 13/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP.
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.
a. Includes all rats, regardless of selection.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D5 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EXAMINED a | N | 16 | 16 | 15 | 16 | 16 |
| MORTALITY | N | 0 | 0 | 0 | 0 | 0 |
| APPEARED NORMAL | N | 16 | 15 | 14 | 16 | 15 |
| STOMACH: MUCOSA, CONTAINED NUMEROUS DARK AREAS | N | 0 | 1 | 0 | 0 | 0 |
| KIDNEYS: LEFT AND/OR RIGHT, PELVIS, SLIGHT OR MODERATE DILATION | N | 0 | 0 | 1 | 0 | 1 |

a. Refer to the individual clinical observations table (Table D29) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D6 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHTS (G) | | | | | | |
| DAY 1 | MEAN±S.D | 232.4 ± 12.7 | 230.8 ± 14.8 | 231.0 ± 13.0 | 232.1 ± 12.3 | 229.9 ± 13.1 |
| DAY 2 | MEAN±S.D | 238.4 ± 14.0 | 238.3 ± 15.1 | 232.7 ± 13.1 | 237.0 ± 13.8 | 237.3 ± 13.5 |
| DAY 3 | MEAN±S.D | 238.2 ± 15.1 | 237.4 ± 14.7 | 234.3 ± 12.9 | 237.2 ± 13.7 | 239.0 ± 13.9 |
| DAY 4 | MEAN±S.D | 242.3 ± 15.5 | 241.6 ± 15.9 | 238.5 ± 13.6 | 241.2 ± 13.0 | 242.5 ± 14.8 |
| DAY 5 | MEAN±S.D | 240.2 ± 14.1 | 240.3 ± 15.9 | 237.4 ± 14.1 | 241.3 ± 13.3 | 241.0 ± 14.4 |
| DAY 6 | MEAN±S.D | 243.1 ± 16.0 | 243.5 ± 16.6 | 238.7 ± 14.2 | 243.1 ± 15.0 | 243.4 ± 14.7 |
| DAY 7 | MEAN±S.D | 249.9 ± 18.1 | 250.1 ± 18.9 | 246.3 ± 14.6 | 249.3 ± 14.8 | 250.4 ± 14.9 |
| DAY 8 | MEAN±S.D | 250.5 ± 18.5 | 251.8 ± 17.9 | 248.9 ± 15.2 | 250.3 ± 15.0 | 252.4 ± 17.0 |
| DAY 9 | MEAN±S.D | 249.3 ± 15.6 | 251.0 ± 18.2 | 248.2 ± 15.5 | 250.8 ± 15.9 | 249.8 ± 16.4 |
| DAY 10 | MEAN±S.D | 251.6 ± 17.0 | 253.8 ± 19.2 | 249.0 ± 15.3 | 251.6 ± 16.8 | 253.7 ± 17.4 |
| DAY 11 | MEAN±S.D | 256.5 ± 17.5 | 256.5 ± 20.8 | 251.3 ± 12.8 | 253.7 ± 16.0 | 255.5 ± 16.0 |
| DAY 12 | MEAN±S.D | 254.1 ± 18.2 | 257.1 ± 20.5 | 251.6 ± 15.8 | 254.4 ± 14.7 | 255.7 ± 17.6 |
| DAY 13 | MEAN±S.D | 254.1 ± 17.0 | 254.7 ± 19.8 | 250.7 ± 15.0 | 254.6 ± 16.1 | 254.3 ± 18.2 |
| DAY 14a | MEAN±S.D | 255.0 ± 18.2 | 256.6 ± 21.2 | 251.7 ± 15.3 | 255.5 ± 17.8 | 255.9 ± 18.7 |

DAY = DAY OF STUDY
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D7 (PAGE 1): BODY WEIGHT CHANGES - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | +17.5 ± 9.7 | +19.3 ± 9.2 | +15.3 ± 9.2 | +17.2 ± 7.2 | +20.5 ± 8.0 |
| DAYS 7 - 14a | MEAN±S.D. | +5.0 ± 5.8 | +6.5 ± 7.1 | +5.4 ± 6.3 | +6.2 ± 7.0 | +5.5 ± 6.5 |
| DAYS 1 - 14a | MEAN±S.D. | +22.5 ± 9.7 | +25.8 ± 10.9 | +20.7 ± 9.4 | +23.4 ± 9.4 | +26.0 ± 11.4 |

DAYS = DAYS OF STUDY
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D8 (PAGE 1): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 0 | MEAN±S.D. | 261.4 ± 21.1 | 265.8 ± 18.2 | 258.1 ± 14.9 | 264.1 ± 18.5 | 261.6 ± 21.6 |
| DAY 1 | MEAN±S.D. | 268.9 ± 22.0 | 272.4 ± 19.1 | 265.3 ± 14.9 | 270.2 ± 18.3 | 269.2 ± 22.0 |
| DAY 2 | MEAN±S.D. | 276.1 ± 22.4 | 277.3 ± 19.4 | 271.9 ± 15.3 | 278.0 ± 18.4 | 276.8 ± 23.5 |
| DAY 3 | MEAN±S.D. | 280.4 ± 26.4 | 285.6 ± 23.1 | 278.9 ± 16.9 | 282.0 ± 16.4 | 283.2 ± 27.0 |
| DAY 4 | MEAN±S.D. | 286.7 ± 26.7 | 289.0 ± 22.6 | 282.5 ± 15.0 | 286.9 ± 18.2 | 286.8 ± 25.4 |
| DAY 5 | MEAN±S.D. | 291.1 ± 27.6 | 294.9 ± 23.1 | 289.9 ± 18.5 | 289.8 ± 17.7 | 290.9 ± 25.5 |
| DAY 6 | MEAN±S.D. | 294.1 ± 28.1 | 297.8 ± 20.1 | 292.4 ± 17.8 | 291.8 ± 19.1 | 292.7 ± 29.8 |
| DAY 7 | MEAN±S.D. | 293.5 ± 28.2 | 299.1 ± 21.8 | 295.2 ± 16.2 | 295.2 ± 19.0 | 295.0 ± 26.2 |
| DAY 8 | MEAN±S.D. | 298.7 ± 28.5 | 301.3 ± 23.2 | 298.1 ± 16.6 | 298.1 ± 20.5 | 299.3 ± 27.0 |
| DAY 9 | MEAN±S.D. | 306.3 ± 29.8 | 305.9 ± 26.1 | 304.5 ± 16.6 | 303.6 ± 18.9 | 306.4 ± 28.6 |
| DAY 10 | MEAN±S.D. | 312.7 ± 30.1 | 314.2 ± 26.4 | 308.3 ± 16.4 | 310.0 ± 18.3 | 311.4 ± 29.1 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D8 (PAGE 2): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 11 | MEAN±S.D. | 319.8 ± 31.2 | 323.2 ± 26.2 | 316.3 ± 18.9 | 315.2 ± 20.7 | 318.0 ± 29.4 |
| DAY 12 | MEAN±S.D. | 322.1 ± 31.0 | 325.2 ± 27.7 | 319.7 ± 20.0 | 318.9 ± 21.0 | 321.7 ± 30.6 |
| DAY 13 | MEAN±S.D. | 324.8 ± 32.7 | 328.7 ± 29.2 | 324.6 ± 20.8 | 321.8 ± 20.8 | 327.3 ± 31.4 |
| DAY 14 | MEAN±S.D. | 330.4 ± 31.4 | 332.3 ± 29.4 | 328.6 ± 20.6 | 328.0 ± 22.4 | 332.0 ± 30.8 |
| DAY 15 | MEAN±S.D. | 337.7 ± 33.5 | 341.6 ± 29.2 | 334.9 ± 23.3 | 334.1 ± 22.2 | 340.1 ± 32.1 |
| DAY 16 | MEAN±S.D. | 345.5 ± 32.5 | 349.1 ± 30.7 | 344.7 ± 22.9 | 343.6 ± 23.2 | 348.6 ± 33.4 |
| DAY 17 | MEAN±S.D. | 359.3 ± 34.0 | 361.2 ± 30.9 | 354.2 ± 22.8 | 357.2 ± 23.2 | 360.2 ± 33.9 |
| DAY 18 | MEAN±S.D. | 373.4 ± 34.1 | 376.1 ± 30.3 | 371.1 ± 25.3 | 370.7 ± 24.9 | 375.4 ± 35.8 |
| DAY 19 | MEAN±S.D. | 388.4 ± 35.8 | 390.6 ± 30.8 | 383.5 ± 25.6 | 386.2 ± 25.0 | 390.4 ± 36.2 |
| DAY 20 | MEAN±S.D. | 400.2 ± 34.3 | 405.0 ± 31.1 | 398.2 ± 26.1 | 402.4 ± 27.2 | 405.2 ± 37.6 |

DAY = DAY OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D9 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | +32.6 ± 10.6 | +31.9 ± 6.5 | +34.3 ± 8.1 | +27.7 ± 5.4 | +31.1 ± 10.9 |
| DAYS 6 - 9 | MEAN±S.D. | +12.2 ± 5.6 | +8.1 ± 7.7 | +12.1 ± 7.2 | +11.9 ± 6.0 | +13.7 ± 7.0 |
| DAYS 9 - 12 | MEAN±S.D. | +15.8 ± 7.4 | +19.3 ± 6.6 | +15.3 ± 7.5 | +15.3 ± 4.4 | +15.3 ± 4.2 |
| DAYS 12 - 15 | MEAN±S.D. | +15.6 ± 5.6 | +16.4 ± 6.3 | +15.1 ± 6.3 | +15.2 ± 5.4 | +18.4 ± 6.2 |
| DAYS 15 - 18 | MEAN±S.D. | +35.8 ± 6.2 | +34.5 ± 6.0 | +36.2 ± 7.4 | +36.6 ± 5.0 | +35.3 ± 4.9 |
| DAYS 18 - 20 | MEAN±S.D. | +26.8 ± 7.3 | +28.9 ± 4.8 | +27.1 ± 4.3 | +31.7 ± 5.2 | +29.9 ± 5.3 |
| DAYS 0 - 20 | MEAN±S.D. | +138.8± 19.3 | +139.2± 17.2 | +140.1± 15.9 | +138.3± 13.6 | +143.6± 18.5 |

DAYS = DAYS OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D10 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 1 | MEAN±S.D. | 305.1 ± 28.6 | 312.6 ± 30.9 | 304.5 ± 18.3 | 305.6 ± 26.2 | 313.6 ± 39.0 |
| DAY 2 | MEAN±S.D. | 303.7 ± 27.8 | 314.1 ± 28.7 | 306.2 ± 20.2 | 309.7 ± 24.0 | 308.9 ± 29.8 |
| DAY 3 | MEAN±S.D. | 306.6 ± 28.7 | 316.9 ± 27.7 | 309.8 ± 21.8 | 314.2 ± 22.8 | 313.6 ± 32.2 |
| DAY 4 | MEAN±S.D. | 308.8 ± 28.9 | 320.1 ± 26.8 | 310.6 ± 21.3 | 318.0 ± 22.0 | 317.2 ± 30.7 |
| DAY 5 | MEAN±S.D. | 310.8 ± 28.2 | 320.7 ± 29.2 | 315.9 ± 22.8 | 319.4 ± 22.1 | 317.9 ± 30.5 |
| DAY 6 | MEAN±S.D. | 311.6 ± 31.5 | 327.4 ± 30.5 | 317.6 ± 24.9 | 320.2 ± 23.3 | 320.4 ± 31.0 |
| DAY 7 | MEAN±S.D. | 318.6 ± 27.0 | 324.8 ± 26.6 | 316.9 ± 22.7 | 320.8 ± 23.4 | 321.4 ± 27.0 |
| DAY 8 | MEAN±S.D. | 318.2 ± 27.3 | 327.9 ± 28.2 | 319.9 ± 21.0 | 322.4 ± 22.0 | 320.6 ± 30.5 |
| DAY 9 | MEAN±S.D. | 321.2 ± 27.5 | 331.0 ± 26.1 | 325.9 ± 19.8 | 324.1 ± 21.1 | 325.9 ± 28.0 |
| DAY 10 | MEAN±S.D. | 323.1 ± 23.9 | 337.1 ± 27.0 | 331.1 ± 21.5 | 330.8 ± 22.9 | 334.5 ± 28.4 |

DAY = DAY OF LACTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D10 (PAGE 2): MATERNAL BODY WEIGHTS - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT (G) | | | | | | |
| DAY 11 | MEAN±S.D. | 331.8 ± 27.3 | 344.2 ± 32.2 | 336.1 ± 19.6 | 333.6 ± 23.2 | 336.6 ± 27.9 |
| DAY 12 | MEAN±S.D. | 328.8 ± 24.6 | 343.4 ± 29.6 | 334.9 ± 19.6 | 334.6 ± 22.3 | 337.9 ± 27.5 |
| DAY 13 | MEAN±S.D. | 331.8 ± 23.6 | 343.6 ± 28.4 | 338.0 ± 19.2 | 338.1 ± 24.5 | 339.8 ± 29.0 |
| DAY 14 | MEAN±S.D. | 333.4 ± 27.2 | 346.5 ± 25.9 | 337.9 ± 19.3 | 340.8 ± 24.5 | 347.4 ± 29.6 |
| DAY 15 | MEAN±S.D. | 337.9 ± 24.5 | 350.1 ± 27.8 | 342.3 ± 19.0 | 338.6 ± 24.1 | 346.8 ± 31.4 |
| DAY 16 | MEAN±S.D. | 340.4 ± 24.5 | 351.6 ± 27.7 | 342.7 ± 25.9 | 340.9 ± 24.8 | 346.0 ± 29.6 |
| DAY 17 | MEAN±S.D. | 341.3 ± 21.3 | 351.9 ± 24.9 | 343.0 ± 20.4 | 343.6 ± 24.0 | 349.6 ± 24.4 |
| DAY 18 | MEAN±S.D. | 340.2 ± 24.6 | 350.3 ± 24.3 | 338.8 ± 25.0 | 341.2 ± 23.4 | 347.4 ± 24.1 |
| DAY 19 | MEAN±S.D. | 337.9 ± 25.5 | 348.3 ± 28.0 | 339.3 ± 22.6 | 340.6 ± 25.7 | 345.9 ± 27.4 |
| DAY 20 | MEAN±S.D. | 332.6 ± 24.0 | 340.6 ± 22.1 | 331.7 ± 18.0 | 333.3 ± 24.9 | 337.0 ± 26.5 |
| DAY 21 | MEAN±S.D. | 327.9 ± 19.4 | 336.6 ± 18.4 | 329.1 ± 18.5 | 325.2 ± 27.0 | 334.9 ± 27.2 |
| DAY 22 | MEAN±S.D. | 329.6 ± 20.6 | 336.3 ± 26.6 | 330.5 ± 18.2 | 325.8 ± 25.0 | 333.6 ± 24.0 |

DAY = DAY OF LACTATION

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TABLE D11 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL BODY WEIGHT CHANGE (G) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | +3.7 ± 11.6 | +7.6 ± 12.3 | +6.1 ± 10.6 | +12.4 ± 11.5 | +3.6 ± 28.9 |
| DAYS 4 - 7 | MEAN±S.D. | +9.8 ± 9.4 | +4.7 ± 7.9 | +6.3 ± 13.9 | +2.8 ± 7.6 | +4.2 ± 9.2 |
| DAYS 7 - 14 | MEAN±S.D. | +14.8 ± 10.1 | +21.7 ± 12.7 | +21.0 ± 15.0 | +19.9 ± 11.5 | +26.0 ± 5.7 |
| DAYS 14 - 22 | MEAN±S.D. | -3.8 ± 16.4 | -10.2 ± 15.7 | -7.5 ± 14.4 | -14.9 ± 15.4 | -13.9 ± 14.9 |
| DAYS 1 - 14 | MEAN±S.D. | +28.2 ± 18.4 | +33.9 ± 18.3 | +33.5 ± 15.6 | +35.2 ± 15.7 | +33.8 ± 30.2 |
| DAYS 1 - 22 | MEAN±S.D. | +24.5 ± 22.1 | +23.8 ± 23.6 | +26.0 ± 17.2 | +20.2 ± 15.2 | +19.9 ± 35.3 |

DAYS = DAYS OF LACTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D12 (PAGE 1): ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 29.2 ± 5.0 | 32.6 ± 7.1 | 30.3 ± 4.8 [ 21]a | 29.4 ± 4.3 | 29.7 ± 5.8 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 28.6 ± 5.5 [ 22]a | 31.2 ± 5.4 [ 22]a | 32.7 ± 6.7 | 28.9 ± 3.1 [ 20]a,c | 30.2 ± 4.6 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 28.8 ± 5.1 [ 22]a | 31.4 ± 5.2 [ 22]a | 32.2 ± 6.2 | 28.9 ± 3.4 [ 20]a,c | 29.6 ± 4.3 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.
c. Excludes values that were incorrectly recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D13 (PAGE 1): RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 121.3 ± 18.4 | 136.2 ± 31.5 | 128.0 ± 21.6 [ 21]a | 122.6 ± 18.3 | 124.3 ± 26.4 [ 22]a |
| DAYS 7 - 14b | MEAN±S.D. | 112.9 ± 18.7 [ 22]a | 123.6 ± 25.6 [ 22]a | 131.5 ± 28.7* | 114.2 ± 12.7 [ 20]a,c | 119.1 ± 17.0 [ 21]a |
| DAYS 1 - 14b | MEAN±S.D. | 116.1 ± 17.6 [ 22]a | 127.5 ± 24.4 [ 22]a | 132.8 ± 27.4* | 116.9 ± 13.8 [ 20]a,c | 119.6 ± 16.0 [ 21]a |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Last value recorded before cohabitation.
c. Excludes values that were incorrectly recorded.
* Significantly different from the carrier group value ($p \leq 0.05$).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D14 (PAGE 1): MATERNAL ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 41.2 ± 7.2 [ 15]a | 41.0 ± 7.4 [ 14]a,b | 42.4 ± 7.3 [ 14]a | 38.7 ± 7.5 [ 15]a | 38.9 ± 5.3 [ 14]a |
| DAYS 6 - 9 | MEAN±S.D. | 45.7 ± 8.7 [ 15]a | 46.6 ± 10.9 [ 14]a | 43.5 ± 8.2 [ 14]a | 45.7 ± 12.5 | 41.9 ± 4.7 |
| DAYS 9 - 12 | MEAN±S.D. | 47.1 ± 7.3 [ 14]a | 49.9 ± 7.2 [ 12]a | 46.6 ± 6.6 [ 14]a | 45.8 ± 7.0 [ 14]a | 43.8 ± 6.4 [ 14]a |
| DAYS 12 - 15 | MEAN±S.D. | 46.7 ± 8.0 [ 14]a | 50.2 ± 8.2 [ 13]a | 45.2 ± 9.7 [ 12]a | 46.0 ± 9.8 [ 13]a | 47.7 ± 10.2 [ 14]a |
| DAYS 15 - 18 | MEAN±S.D. | 49.0 ± 6.5 [ 13]a | 54.6 ± 9.1 [ 12]a | 50.9 ± 6.4 [ 13]a | 48.2 ± 6.6 [ 15]a | 51.8 ± 6.3 [ 15]b |
| DAYS 18 - 20 | MEAN±S.D. | 43.9 ± 8.3 [ 14]a | 49.9 ± 6.5 | 44.4 ± 6.2 [ 12]a | 45.3 ± 5.8 [ 15]a | 47.8 ± 8.2 [ 15]a |
| DAYS 0 - 20 | MEAN±S.D. | 45.5 ± 6.4 [ 14]a | 48.1 ± 6.1 | 44.0 ± 5.6 [ 12]a | 43.4 ± 5.4 [ 15]a | 44.0 ± 5.0 [ 15]a |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE D15 (PAGE 1): MATERNAL RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 146.5 ± 23.2 [ 15]a | 144.6 ± 27.4 [ 14]a,b | 153.0 ± 27.2 [ 14]a | 138.1 ± 26.2 [ 15]a | 139.8 ± 15.8 [ 14]a |
| DAYS 6 - 9 | MEAN±S.D. | 156.5 ± 29.2 [ 15]a | 154.2 ± 38.8 [ 14]a | 145.8 ± 28.2 [ 14]a | 153.7 ± 39.5 | 141.5 ± 20.0 |
| DAYS 9 - 12 | MEAN±S.D. | 149.6 ± 22.3 [ 14]a | 155.0 ± 27.1 [ 12]a | 148.8 ± 22.4 [ 14]a | 147.4 ± 20.1 [ 14]a | 140.7 ± 23.1 [ 14]a |
| DAYS 12 - 15 | MEAN±S.D. | 142.5 ± 23.6 [ 14]a | 149.6 ± 24.4 [ 13]a | 137.8 ± 29.9 [ 12]a | 142.5 ± 28.0 [ 13]a | 144.3 ± 32.1 [ 14]a |
| DAYS 15 - 18 | MEAN±S.D. | 140.3 ± 15.5 [ 13]a | 154.6 ± 29.3 [ 12]a | 144.8 ± 18.6 [ 13]a | 138.2 ± 20.3 [ 15]a | 147.8 ± 25.5 [ 15]b |
| DAYS 18 - 20 | MEAN±S.D. | 114.0 ± 27.7 [ 14]a | 128.6 ± 19.7 | 116.0 ± 17.4 [ 12]a | 117.6 ± 11.1 [ 15]a | 124.6 ± 26.6 [ 15]a |
| DAYS 0 - 20 | MEAN±S.D. | 142.4 ± 17.2 [ 14]a | 150.6 ± 21.6 | 140.0 ± 19.7 [ 12]a | 137.6 ± 15.7 [ 15]a | 140.1 ± 20.2 [ 15]a |

DAYS = DAYS OF GESTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE D16 (PAGE 1): MATERNAL ABSOLUTE WATER CONSUMPTION VALUES (G/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 44.2 ± 10.6 [ 15]a | 50.6 ± 11.8 [ 14]a | 48.6 ± 9.6 | 51.1 ± 8.5 | 53.1 ± 6.8 |
| DAYS 4 - 7 | MEAN±S.D. | 60.4 ± 11.2 | 70.2 ± 9.4** | 63.2 ± 9.2 [ 14]a | 61.9 ± 8.7 | 63.8 ± 6.3 |
| DAYS 7 - 14 | MEAN±S.D. | 72.4 ± 8.6 | 83.0 ± 7.4** [ 15]a | 76.4 ± 7.7 [ 14]a | 76.3 ± 8.5 | 76.9 ± 7.7 [ 15]b |
| DAYS 1 - 14 | MEAN±S.D. | 63.3 ± 8.3 | 72.9 ± 8.4** [ 15]a | 66.5 ± 7.4 [ 14]a | 67.2 ± 7.3 | 68.2 ± 6.7 [ 15]b |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.
** Significantly different from the carrier group value ($p \leq 0.01$).

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TABLE D17 (PAGE 1): MATERNAL RELATIVE WATER CONSUMPTION VALUES (G/KG/DAY) - LACTATION - SUMMARY

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL WATER CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 145.5 ± 37.1<br>[ 15]a | 160.0 ± 42.0<br>[ 14]a | 157.9 ± 29.8 | 163.9 ± 24.7 | 170.9 ± 25.8 |
| DAYS 4 - 7 | MEAN±S.D. | 193.8 ± 34.5 | 218.8 ± 34.6 | 199.4 ± 28.7<br>[ 14]a | 193.7 ± 24.8 | 201.2 ± 25.6 |
| DAYS 7 - 14 | MEAN±S.D. | 222.4 ± 24.3 | 245.3 ± 23.6<br>[ 15]a | 231.0 ± 24.1<br>[ 14]a | 231.2 ± 26.6 | 233.3 ± 26.8<br>[ 15]b |
| DAYS 1 - 14 | MEAN±S.D. | 199.6 ± 25.5 | 221.0 ± 29.3<br>[ 15]a | 205.9 ± 22.3<br>[ 14]a | 207.7 ± 21.7 | 212.2 ± 25.4<br>[ 15]b |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage or presumed spillage.
b. Excludes values that were not recorded.

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TABLE D18 (PAGE 1): ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 19.0 ± 2.2 | 19.4 ± 2.9 | 19.1 ± 2.6 | 19.4 ± 2.0 [ 22]a | 19.0 ± 2.4 [ 22]b |
| DAYS 7 - 14c | MEAN±S.D. | 18.5 ± 2.0 | 19.0 ± 2.2 | 18.7 ± 1.2 [ 22]d | 18.8 ± 1.8 | 18.6 ± 2.2 |
| DAYS 1 - 14c | MEAN±S.D. | 18.8 ± 1.9 | 19.2 ± 2.4 | 18.9 ± 1.7 [ 22]d | 19.4 ± 2.4 | 18.8 ± 2.2 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.
b. Excludes values that were incorrectly recorded.
c. Last value recorded before cohabitation.
d. Excludes values that were not recorded.

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TABLE D19 (PAGE 1): RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS TESTED | N | 23 | 23 | 23 | 23 | 23 |
| FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 7 | MEAN±S.D. | 79.0 ± 6.1 | 80.9 ± 10.0 | 80.9 ± 13.4 | 80.9 ± 6.8 [ 22]a | 79.1 ± 8.5 [ 22]b |
| DAYS 7 - 14c | MEAN±S.D. | 73.3 ± 5.5 | 74.6 ± 5.7 | 74.8 ± 4.2 [ 22]d | 74.5 ± 4.6 | 73.3 ± 5.3 |
| DAYS 1 - 14c | MEAN±S.D. | 76.0 ± 5.0 | 77.4 ± 6.8 | 77.6 ± 8.1 [ 22]d | 78.6 ± 7.0 | 75.8 ± 6.2 |

DAYS = DAYS OF STUDY
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.
b. Excludes values that were incorrectly recorded.
c. Last value recorded before cohabitation.
d. Excludes values that were not recorded.

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TABLE D20 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 23.2 ± 3.0 | 23.1 ± 2.2 | 23.5 ± 1.5 | 23.3 ± 2.0 | 22.9 ± 2.9 |
| DAYS 6 - 9 | MEAN±S.D. | 24.7 ± 3.3 | 24.8 ± 3.2 | 25.5 ± 2.2 | 24.3 ± 2.6 | 24.9 ± 3.4 |
| DAYS 9 - 12 | MEAN±S.D. | 25.7 ± 3.8 | 25.1 ± 3.4 | 25.5 ± 2.4 | 24.4 ± 2.6 | 24.7 ± 3.0 |
| DAYS 12 - 15 | MEAN±S.D. | 24.8 ± 2.9 | 23.8 ± 3.6 | 24.0 ± 2.7 | 23.5 ± 2.4 | 24.6 ± 2.5 |
| DAYS 15 - 18 | MEAN±S.D. | 26.0 ± 3.3 | 25.5 ± 3.3 | 25.6 ± 2.5 | 24.3 ± 2.6 | 25.6 ± 3.1 |
| DAYS 18 - 20 | MEAN±S.D. | 23.3 ± 3.4 | 23.7 ± 2.3 | 24.1 ± 3.6 | 23.0 ± 3.1 | 23.1 ± 3.0 |
| DAYS 0 - 20 | MEAN±S.D. | 24.4 ± 2.7 | 24.2 ± 2.5 | 24.6 ± 1.7 | 23.8 ± 2.0 | 24.2 ± 2.7 |

DAYS = DAYS OF GESTATION

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TABLE D21 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 0 - 6 | MEAN±S.D. | 82.7 ± 5.4 | 81.5 ± 4.7 | 84.9 ± 3.6 | 82.9 ± 4.3 | 81.6 ± 5.1 |
| DAYS 6 - 9 | MEAN±S.D. | 82.7 ± 5.4 | 82.0 ± 5.8 | 85.9 ± 6.8 | 81.9 ± 6.7 | 83.3 ± 5.1 |
| DAYS 9 - 12 | MEAN±S.D. | 81.5 ± 7.1 | 79.1 ± 6.8 | 81.5 ± 5.4 | 78.2 ± 5.9 | 78.6 ± 4.7 |
| DAYS 12 - 15 | MEAN±S.D. | 75.4 ± 4.9 | 71.4 ± 6.8 | 73.2 ± 4.7 | 72.1 ± 5.2 | 74.6 ± 3.0 |
| DAYS 15 - 18 | MEAN±S.D. | 73.5 ± 7.4 | 71.3 ± 6.9 | 72.9 ± 5.3 | 69.1 ± 4.9 | 71.8 ± 5.3 |
| DAYS 18 - 20 | MEAN±S.D. | 60.4 ± 7.8 | 60.7 ± 5.2 | 62.7 ± 8.6 | 59.5 ± 6.2 | 59.2 ± 5.0 |
| DAYS 0 - 20 | MEAN±S.D. | 76.9 ± 3.9 | 75.3 ± 4.0 | 77.9 ± 2.8 | 75.1 ± 3.4 | 75.8 ± 3.1 |

DAYS = DAYS OF GESTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D22 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 26.2 ± 7.2 | 30.3 ± 6.6 | 28.5 ± 5.7 | 31.8 ± 7.6 | 31.2 ± 7.0 [ 15]a |
| DAYS 4 - 7 | MEAN±S.D. | 40.2 ± 10.2 | 42.2 ± 4.8 | 40.5 ± 5.3 [ 14]b | 40.7 ± 4.6 | 41.0 ± 5.6 |
| DAYS 7 - 14 | MEAN±S.D. | 50.4 ± 5.1 | 55.6 ± 5.6* | 56.1 ± 5.5** | 53.6 ± 5.5 | 54.6 ± 4.9 |
| DAYS 1 - 14 | MEAN±S.D. | 42.4 ± 5.7 | 46.6 ± 4.7 | 46.0 ± 4.6 | 45.6 ± 5.4 | 46.0 ± 4.5 |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.
b. Excludes values that were incorrectly recorded.
* Significantly different from the carrier group value ($p \leq 0.05$).
** Significantly different from the carrier group value ($p \leq 0.01$).

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TABLE D23 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - LACTATION - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP<br>DOSAGE (MG/KG/DAY) | | I<br>0 (CARRIER) | II<br>0.01 | III<br>0.1 | IV<br>1.0 | V<br>30.0 |
|---|---|---|---|---|---|---|
| RATS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16 | 16 | 15 | 16 | 16 |
| MATERNAL FEED CONSUMPTION (G/KG/DAY) | | | | | | |
| DAYS 1 - 4 | MEAN±S.D. | 85.9 ± 24.2 | 96.5 ± 22.4 | 92.8 ± 18.6 | 101.2 ± 17.4 | 100.2 ± 25.5<br>[ 15]a |
| DAYS 4 - 7 | MEAN±S.D. | 129.0 ± 31.8 | 130.8 ± 10.8 | 128.1 ± 18.2<br>[ 14]b | 127.5 ± 12.0 | 129.1 ± 17.6 |
| DAYS 7 - 14 | MEAN±S.D. | 155.3 ± 16.6 | 165.1 ± 11.6 | 170.4 ± 18.4 | 162.0 ± 8.9 | 164.2 ± 12.3 |
| DAYS 1 - 14 | MEAN±S.D. | 133.9 ± 18.2 | 141.8 ± 11.4 | 143.3 ± 15.2 | 140.5 ± 9.7 | 141.7 ± 12.9 |

DAYS = DAYS OF LACTATION
[ ] = NUMBER OF VALUES AVERAGED
a. Excludes values that were associated with spillage.
b. Excludes values that were incorrectly recorded.

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TABLE D24 (PAGE 1): NATURAL DELIVERY OBSERVATIONS - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| RATS ASSIGNED TO NATURAL DELIVERY AND EVALUATION | N | 16 | 16 | 15 | 16 | 16 |
| PREGNANT | N | 16(100.0) | 16(100.0) | 15(100.0) | 16(100.0) | 16(100.0) |
| DELIVERED LITTERS | N(%) | 16(100.0) | 16(100.0) | 15(100.0) | 16(100.0) | 16(100.0) |
| DURATION OF GESTATION a | MEAN±S.D. | 22.8 ± 0.4 | 22.8 ± 0.4 | 22.7 ± 0.5 | 22.6 ± 0.5 | 22.9 ± 0.5 |
| IMPLANTATION SITES | N | 256 | 241 | 234 | 256 | 266 |
| PER DELIVERED LITTER | MEAN±S.D. | 16.0 ± 1.5 | 15.1 ± 1.3 | 15.6 ± 2.4 | 16.0 ± 1.5 | 16.6 ± 1.7 |
| DAMS WITH STILLBORN PUPS | N(%) | 2( 12.5) | 2( 12.5) | 0( 0.0) | 3( 18.8) | 1( 6.2) |
| GESTATION INDEX b | % | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | N/N | 16/ 16 | 16/ 16 | 16/ 16 | 16/ 16 | 16/ 16 |

a. Calculated as the time (in days) elapsed between confirmed mating (arbitrarily defined as day 0) and the time (in days) the first pup was delivered.
b. Number of rats with live offspring/number of pregnant rats.

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TABLE D25 (PAGE 1): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 15 | 16 | 16 |
| PUPS DELIVERED (TOTAL) | N | 244 | 234 | 216 | 240 | 251 |
| | MEAN±S.D. | 15.2 ± 1.4 | 14.6 ± 1.2 | 14.4 ± 2.4 | 15.0 ± 1.4 | 15.7 ± 1.9 |
| LIVEBORN | MEAN±S.D. | 15.1 ± 1.3 | 14.5 ± 1.3 | 14.4 ± 2.4 | 14.8 ± 1.5 | 15.5 ± 1.9 |
| | N(%) | 242( 99.2) | 232( 99.1) | 216(100.0) | 236( 98.3) | 248( 98.8) |
| STILLBORN | MEAN±S.D. | 0.1 ± 0.3 | 0.1 ± 0.3 | 0.0 ± 0.0 | 0.2 ± 0.4 | 0.2 ± 0.8 |
| | N(%) | 2( 0.8) | 2( 0.8) | 0( 0.0) | 3( 1.2) | 3( 1.2) |
| UNKNOWN VITAL STATUS | N | 0 | 0 | 0 | 1 | 0 |
| CULLED | N | 111 | 103 | 94 | 103 | 115 |
| PUPS FOUND DEAD OR PRESUMED CANNIBALIZED | | | | | | |
| DAY 1 | N/N(%) | 1/242( 0.4) | 0/232( 0.0) | 1/216( 0.5) | 0/236( 0.0) | 2/248( 0.8) |
| DAYS 2- 5 | N/N(%) | 2/241( 0.8) | 1/232( 0.4) | 1/215( 0.5) | 5/236( 2.1) | 3/246( 1.2) |
| DAYS 6- 8 | N/N(%) | 0/128( 0.0) | 0/128( 0.0) | 1/121( 0.8) | 0/128( 0.0) | 1/128( 0.8) |
| DAYS 9-14 | N/N(%) | 1/128( 0.8) | 0/128( 0.0) | 0/119( 0.0) | 0/128( 0.0) | 0/127( 0.0) |
| DAYS 15-22 | N/N(%) | 0/127( 0.0) | 0/128( 0.0) | 0/119( 0.0) | 0/128( 0.0) | 0/127( 0.0) |
| VIABILITY INDEX a | % | 98.8 | 99.6 | 99.1 | 97.9 | 98.0 |
| | N/N | 239/242 | 231/232 | 214/216 | 231/236 | 243/248 |
| LACTATION INDEX b | % | 99.2 | 100.0 | 98.3 | 100.0 | 99.2 |
| | N/N | 127/128 | 128/128 | 119/121 | 128/128 | 127/128 |

DAY(S) = DAY(S) POSTPARTUM
a. Number of live pups on day 5(preculling) postpartum/number of liveborn pups on day 1 postpartum.
b. Number of live pups on day 22(weaning) postpartum/number of live pups on day 5(postculling) postpartum.

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TABLE D25 (PAGE 2): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 15 | 16 | 16 |
| SURVIVING PUPS/LITTER a | | | | | | |
| DAY 1 b | MEAN±S.D. | 15.1 ± 1.3 | 14.5 ± 1.3 | 14.4 ± 2.4 | 14.8 ± 1.5 | 15.5 ± 1.9 |
| DAY 5 PRECULLING | MEAN±S.D. | 14.9 ± 1.4 | 14.4 ± 1.3 | 14.3 ± 2.2 | 14.4 ± 1.4 | 15.2 ± 1.6 |
| DAY 5 POSTCULLING | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.1 ± 0.2 | 8.0 ± 0.0 | 8.0 ± 0.0 |
| DAY 8 | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| DAY 14 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| DAY 22 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| PERCENT MALE PUPS PER NUMBER OF PUPS SEXED | | | | | | |
| DAY 1 b | MEAN±S.D. | 50.8 ± 15.1 | 49.7 ± 12.8 | 51.1 ± 11.3 | 47.2 ± 11.7 | 50.5 ± 9.5 |
| DAY 5 PRECULLING | MEAN±S.D. | 51.6 ± 15.8 | 49.6 ± 12.6 | 51.6 ± 11.5 | 47.4 ± 10.9 | 50.7 ± 10.2 |
| DAY 5 POSTCULLING | MEAN±S.D. | 50.8 ± 3.1 | 50.0 ± 0.0 | 48.8 ± 3.4 | 50.0 ± 0.0 | 50.0 ± 0.0 |
| DAY 8 | MEAN±S.D. | 50.8 ± 3.1 | 50.0 ± 0.0 | 49.6 ± 3.8 | 50.0 ± 0.0 | 49.6 ± 1.8 |
| DAY 14 | MEAN±S.D. | 51.2 ± 3.5 | 50.0 ± 0.0 | 49.6 ± 3.8 | 50.0 ± 0.0 | 49.6 ± 1.8 |
| DAY 22 | MEAN±S.D. | 51.2 ± 3.5 | 50.0 ± 0.0 | 49.6 ± 3.8 | 50.0 ± 0.0 | 49.6 ± 1.8 |

DAY = DAY POSTPARTUM

a. Average number of live pups per litter, including litters with no surviving pups.

b. Includes pups born alive, found dead day 1 postpartum.

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TABLE D25 (PAGE 3): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PUPS | N | 16 | 16 | 15 | 16 | 16 |
| LIVE LITTER SIZE AT WEIGHING | | | | | | |
| DAY 1 | MEAN±S.D. | 15.1 ± 1.3 | 14.5 ± 1.3 | 14.3 ± 2.2 | 14.8 ± 1.5 | 15.4 ± 1.8 |
| DAY 5 PRECULLING | MEAN±S.D. | 14.9 ± 1.4 | 14.4 ± 1.3 | 14.3 ± 2.2 | 14.4 ± 1.4 | 15.2 ± 1.6 |
| DAY 5 POSTCULLING | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 8.1 ± 0.2 | 8.0 ± 0.0 | 8.0 ± 0.0 |
| DAY 8 | MEAN±S.D. | 8.0 ± 0.0 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| DAY 14 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| DAY 22 | MEAN±S.D. | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 | 8.0 ± 0.0 | 7.9 ± 0.2 |
| PUP WEIGHT/LITTER (GRAMS) | | | | | | |
| DAY 1 | MEAN±S.D. | 6.3 ± 0.4 | 6.5 ± 0.3 | 6.2 ± 0.5 | 6.3 ± 0.4 | 6.5 ± 0.4 |
| DAY 5 PRECULLING | MEAN±S.D. | 9.0 ± 0.8 | 9.7 ± 0.5 | 9.4 ± 0.8 | 9.8 ± 0.8* | 9.8 ± 1.2* |
| DAY 5 POSTCULLING | MEAN±S.D. | 9.0 ± 0.9 | 9.7 ± 0.5* | 9.3 ± 0.8 | 9.8 ± 0.9* | 9.9 ± 1.1** |
| DAY 8 | MEAN±S.D. | 14.0 ± 2.6 | 15.6 ± 1.3* | 15.3 ± 1.3 | 16.0 ± 1.5** | 16.3 ± 2.1** |
| DAY 14 | MEAN±S.D. | 27.3 ± 4.0 | 30.5 ± 2.7** | 30.1 ± 1.9* | 30.6 ± 2.6** | 31.4 ± 3.7** |
| DAY 22 | MEAN±S.D. | 46.9 ± 6.2 | 52.2 ± 4.3 | 51.1 ± 4.0 | 51.0 ± 3.6 | 57.4 ± 15.3* |

DAY = DAY POSTPARTUM
* Significantly different from the carrier group value ($p \leq 0.05$).
** Significantly different from the carrier group value ($p \leq 0.01$).

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TABLE D26 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 22 POSTPARTUM - SUMMARY - F1 GENERATION PUPS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| LITTERS EXAMINED (N) | | 16 | 16 | 15 | 16 | 16 |
| TRANSIENT CLINICAL OBSERVATIONS: a | | | | | | |
| BASE OF TAIL, KINKED | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 13/ 1 |
| BACK, DARK AREA | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 | 4/ 1 |
| LOWER MIDLINE: DARK AREA | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 4/ 1 | 0/ 0 |
| LEFT HINDPAW, SWOLLEN | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 2/ 1 | 0/ 0 |
| COLD TO TOUCH | N/N | 1/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| NOT NURSING | N/N | 1/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |
| PERSISTENT CLINICAL OBSERVATIONS: a | | | | | | |
| TIP OF TAIL BLACK | N/N | 0/ 0 | 0/ 0 | 0/ 0 | 5/ 1 | 0/ 0 |
| TIP OF TAIL MISSING | N/N | 0/ 0 | 22/ 1 | 0/ 0 | 0/ 0 | 0/ 0 |
| TAIL, BENT | N/N | 5/ 1 | 0/ 0 | 0/ 0 | 0/ 0 | 0/ 0 |

STATISTICAL ANALYSES WERE RESTRICTED TO THE NUMBER OF LITTERS WITH OBSERVATIONS.
N/N = TOTAL FREQUENCY (DAYS X PUPS)/LITTERS WITH OBSERVATIONS
a. Tabulation restricted to adverse observations; all other pups appeared normal.

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TABLE D27 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - F1 GENERATION PUPS - PART C

| DOSAGE GROUP | | I | II | III | IV | V |
|---|---|---|---|---|---|---|
| DOSAGE (MG/KG/DAY) | | 0 (CARRIER) | 0.01 | 0.1 | 1.0 | 30.0 |
| LITTERS EXAMINED AND EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| TOTAL PUPS STILLBORN OR FOUND DEAD a,b | N | 5 | 3 | 1 | 4 | 6 |
| STILLBORN | N | 2 | 2 | 0 | 3 | 1 |
| FOUND DEAD | N | 3 | 1 | 1 | 1 | 5 |
| NO MILK IN STOMACH c | N(%) | 2( 66.7) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 1( 20.0) |
| TAIL, MISSING | N(%) | 1( 20.0) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 0( 0.0) |
| PUPS SACRIFICED AND NECROPSIED ON DAY 22 POSTPARTUM | | | | | | |
| LITTERS EVALUATED | N | 16 | 16 | 15 | 16 | 16 |
| PUPS EVALUATED | N | 127 | 128 | 119 | 128 | 127 |
| APPEARED NORMAL | | | | | | |
| LITTER INCIDENCE | N(%) | 16(100.0) | 13( 81.2) | 11( 73.3) | 12( 75.0) | 15( 93.8) |
| PUP INCIDENCE | N(%) | 127(100.0) | 125( 97.6) | 115( 96.6) | 124( 96.9) | 126( 99.2) |
| KIDNEY, RIGHT, PELVIS SLIGHT OR MODERATE DILATION | | | | | | |
| LITTER INCIDENCE | N(%) | 0( 0.0) | 3( 18.8) | 4( 2.7) | 3( 18.8) | 1( 6.2) |
| PUP INCIDENCE | N(%) | 0( 0.0) | 3( 2.3) | 4( 3.4) | 3( 2.3) | 1( 0.8) |
| TIP OF TAIL BLACK | | | | | | |
| LITTER INCIDENCE | N(%) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 1( 6.2) | 0( 0.0) |
| PUP INCIDENCE | N(%) | 0( 0.0) | 0( 0.0) | 0( 0.0) | 1( 0.8) | 0( 0.0) |

a. Restricted to pups in which complete necropsies were performed. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation.
b. Refer to the individual pup clinical observation table (Table D43) for external clinical observations confirmed at necropsy.
c. Analysis restricted to pups found dead and necropsied.

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TABLE D28 (PAGE 1): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16731 | | NO ADVERSE FINDINGS |
| 16732 | | NO ADVERSE FINDINGS |
| 16733 | | NO ADVERSE FINDINGS |
| 16734 | | NO ADVERSE FINDINGS |
| 16735 | DL( 10- 22) | LOCALIZED ALOPECIA: LIMBS a |
| 16736 | | NO ADVERSE FINDINGS |
| 16737 | | NO ADVERSE FINDINGS |
| 16738 | | NO ADVERSE FINDINGS |
| 16739 | | NO ADVERSE FINDINGS |
| 16740 | DG( 5- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 22) | LOCALIZED ALOPECIA: LIMBS a |
| 16741 | | NO ADVERSE FINDINGS |
| 16742 | | NO ADVERSE FINDINGS |
| 16743 | DL( 7- 8) | INCISORS: MISSING/BROKEN |
| 16744 | | NO ADVERSE FINDINGS |
| 16745 | | NO ADVERSE FINDINGS |
| 16746 | | NO ADVERSE FINDINGS |
| 16747 | DG( 2 ) | BACK: SCAB (1.0 CM X 0.1 CM) |
| | DG( 3 ) | SCAB HEALED |
| 16748 | | NO ADVERSE FINDINGS |
| 16749 | | NO ADVERSE FINDINGS |
| 16750 | DL( 8- 20) | LOCALIZED ALOPECIA: UNDERSIDE |
| | DL( 21 ) | ALOPECIA NO LONGER APPARENT |
| 16751 | | NO ADVERSE FINDINGS |
| 16752 | | NO ADVERSE FINDINGS |
| 16753 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D28 (PAGE 2): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP II | | 0.01 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16754 | | NO ADVERSE FINDINGS |
| 16755 | | NO ADVERSE FINDINGS |
| 16756 | DS( 15- 17) | RIGHT EAR: TORN |
| | DG( 0- 21) | RIGHT EAR: TORN |
| | DL( 1- 22) | RIGHT EAR: TORN |
| 16757 | | NO ADVERSE FINDINGS |
| 16758 | | NO ADVERSE FINDINGS |
| 16759 | | NO ADVERSE FINDINGS |
| 16760 | | NO ADVERSE FINDINGS |
| 16761 | | NO ADVERSE FINDINGS |
| 16762 | DG( 6- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 22) | LOCALIZED ALOPECIA: LIMBS a |
| 16763 | | NO ADVERSE FINDINGS |
| 16764 | | NO ADVERSE FINDINGS |
| 16765 | | NO ADVERSE FINDINGS |
| 16766 | | NO ADVERSE FINDINGS |
| 16767 | | NO ADVERSE FINDINGS |
| 16768 | | NO ADVERSE FINDINGS |
| 16769 | | NO ADVERSE FINDINGS |
| 16770 | | NO ADVERSE FINDINGS |
| 16771 | | NO ADVERSE FINDINGS |
| 16772 | | NO ADVERSE FINDINGS |
| 16773 | | NO ADVERSE FINDINGS |
| 16774 | | NO ADVERSE FINDINGS |
| 16775 | | NO ADVERSE FINDINGS |
| 16776 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D28 (PAGE 3): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP III | | 0.1 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16777 | | NO ADVERSE FINDINGS |
| 16778 | | NO ADVERSE FINDINGS |
| 16779 | | NO ADVERSE FINDINGS |
| 16780 | | NO ADVERSE FINDINGS |
| 16781 | | NO ADVERSE FINDINGS |
| 16782 | | NO ADVERSE FINDINGS |
| 16783 | | NO ADVERSE FINDINGS |
| 16784 | | NO ADVERSE FINDINGS |
| 16785 | | NO ADVERSE FINDINGS |
| 16786 | | NO ADVERSE FINDINGS |
| 16787 | | NO ADVERSE FINDINGS |
| 16788 | | NO ADVERSE FINDINGS |
| 16789 | | NO ADVERSE FINDINGS |
| 16790 | DG( 12- 13) | LOCALIZED ALOPECIA: LIMBS |
| | DG( 16- 25) | LOCALIZED ALOPECIA: LIMBS |
| 16791 | | NO ADVERSE FINDINGS |
| 16792 | | NO ADVERSE FINDINGS |
| 16793 | | NO ADVERSE FINDINGS |
| 16794 | | NO ADVERSE FINDINGS |
| 16795 | | NO ADVERSE FINDINGS |
| 16796 | | NO ADVERSE FINDINGS |
| 16797 | | NO ADVERSE FINDINGS |
| 16798 | | NO ADVERSE FINDINGS |
| 16799 | DL( 6- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 22 ) | ALOPECIA NO LONGER APPARENT |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D28 (PAGE 4): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16800 | | NO ADVERSE FINDINGS |
| 16801 | DG( 2 ) | CHROMORHINORRHEA |
| 16802 | | NO ADVERSE FINDINGS |
| 16803 | | NO ADVERSE FINDINGS |
| 16804 | | NO ADVERSE FINDINGS |
| 16805 | | NO ADVERSE FINDINGS |
| 16806 | | NO ADVERSE FINDINGS |
| 16807 | | NO ADVERSE FINDINGS |
| 16808 | | NO ADVERSE FINDINGS |
| 16809 | | NO ADVERSE FINDINGS |
| 16810 | | NO ADVERSE FINDINGS |
| 16811 | | NO ADVERSE FINDINGS |
| 16812 | | NO ADVERSE FINDINGS |
| 16813 | | NO ADVERSE FINDINGS |
| 16814 | | NO ADVERSE FINDINGS |
| 16815 | | NO ADVERSE FINDINGS |
| 16816 | | NO ADVERSE FINDINGS |
| 16817 | | NO ADVERSE FINDINGS |
| 16818 | | NO ADVERSE FINDINGS |
| 16819 | | NO ADVERSE FINDINGS |
| 16820 | | NO ADVERSE FINDINGS |
| 16821 | | NO ADVERSE FINDINGS |
| 16822 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D28 (PAGE 5): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP V | | 30.0 MG/KG/DAY |
|---|---|---|
| RAT # | | DESCRIPTION |
| 16823 | DL( 4- 8) | INCISORS: MISALIGNED |
| | DL( 9 ) | INCISORS REALIGNED |
| | DL( 9- 13) | INCISORS: MISSING/BROKEN |
| | DL( 14 ) | INCISOR(S) GROWN IN |
| 16824 | | NO ADVERSE FINDINGS |
| 16825 | | NO ADVERSE FINDINGS |
| 16826 | | NO ADVERSE FINDINGS |
| 16827 | | NO ADVERSE FINDINGS |
| 16828 | DG( 11 ) | CHROMORHINORRHEA |
| | DL( 14- 22) | EAR TORN a |
| 16829 | DS( 11- 15) | INCISORS: MISSING/BROKEN |
| | DS( 16 ) | INCISOR(S) GROWN IN |
| | DG( 6- 21) | LOCALIZED ALOPECIA: LIMBS |
| | DL( 1- 15) | LOCALIZED ALOPECIA: LIMBS |
| 16830 | | NO ADVERSE FINDINGS |
| 16831 | | NO ADVERSE FINDINGS |
| 16832 | | NO ADVERSE FINDINGS |
| 16833 | | NO ADVERSE FINDINGS |
| 16834 | | NO ADVERSE FINDINGS |
| 16835 | | NO ADVERSE FINDINGS |
| 16836 | | NO ADVERSE FINDINGS |
| 16837 | | NO ADVERSE FINDINGS |
| 16838 | | NO ADVERSE FINDINGS |
| 16839 | | NO ADVERSE FINDINGS |
| 16840 | | NO ADVERSE FINDINGS |
| 16841 | DG( 21 ) | CHROMODACRYORRHEA |
| 16842 | | NO ADVERSE FINDINGS |
| 16843 | | NO ADVERSE FINDINGS |
| 16844 | | NO ADVERSE FINDINGS |
| 16845 | | NO ADVERSE FINDINGS |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
a. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D29 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| I | | | | | |
| 0 (CARRIER) | 16731 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16732 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16734 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16735 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16736 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16737 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16738 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16740 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16741 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16742 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16745 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16746 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16747 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16749 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16750 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16753 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
P = PREGNANT NP = NOT PREGNANT
a. Refer to the individual clinical observation table (Table D28) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D29 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| II | | | | | |
| 0.01 | 16755 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16758 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16760 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16761 | DL 22 | P | 56 | ALL TISSUES APPEARED NORMAL. |
| | 16762 | DL 22 | P | 57 | STOMACH: MUCOSA, CONTAINED NUMEROUS DARK AREAS (PINPOINT TO 0.1 CM IN DIAMETER). ALL OTHER TISSUES APPEARED NORMAL. |
| | 16763 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16764 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16765 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16767 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16768 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16769 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16770 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16771 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16773 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16774 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16776 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
P = PREGNANT NP = NOT PREGNANT
a. Refer to the individual clinical observation table (Table D28) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D29 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| III | | | | | |
| 0.1 | 16781 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16782 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16783 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16784 | DL 22 | P | 57 | KIDNEY: LEFT, PELVIS, SLIGHT DILATION. ALL OTHER TISSUES APPEARED NORMAL. |
| | 16786 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16787 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16791 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16792 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16793 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16794 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16795 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16796 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16797 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16798 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16799 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
P = PREGNANT NP = NOT PREGNANT
a. Refer to the individual clinical observation table (Table D28) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D29 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| IV | | | | | |
| 1.0 | 16800 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16801 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16802 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16803 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16805 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16806 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16807 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16808 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16810 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16811 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16814 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16815 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16817 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16818 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16820 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16822 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
P = PREGNANT NP = NOT PREGNANT
a. Refer to the individual clinical observation table (Table D28) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D29 (PAGE 5): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DOSAGE GROUP DOSAGE (MG/KG/DAY) | RAT NUMBER | DAY OF NECROPSY | PREGNANCY STATUS | DAYS OF EXPOSURE | OBSERVATIONS a |
|---|---|---|---|---|---|
| V | | | | | |
| 30.0 | 16823 | DL 22 | P | 58 | ALL TISSUES APPEARED NORMAL. |
| | 16825 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16826 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16827 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16828 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16830 | DL 22 | P | 57 | ALL TISSUES APPEARED NORMAL. |
| | 16831 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16833 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16834 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16836 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16837 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16839 | DL 22 | P | 59 | KIDNEYS: RIGHT, PELVIS, MODERATE DILATION; LEFT, PELVIS, SLIGHT DILATION. ALL OTHER TISSUES APPEARED NORMAL. |
| | 16840 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16842 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |
| | 16843 | DL 22 | P | 60 | ALL TISSUES APPEARED NORMAL. |
| | 16844 | DL 22 | P | 59 | ALL TISSUES APPEARED NORMAL. |

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION
P = PREGNANT NP = NOT PREGNANT
a. Refer to the individual clinical observation table (Table D28) for external observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | | | |
| 16731 | 205. | 204. | 207. | 215. | 213. | 211. | 220. | 220. | 223. | 218. | 226. | 228. | 223. | 220. | 233. | 238. |
| 16732 | 264. | 273. | 276. | 281. | 275. | 291. | 301. | 300. | 287. | 302. | 306. | 304. | 296. | 309. | 311. | 315. |
| 16733 | 232. | 240. | 239. | 245. | 237. | 243. | 258. | 257. | 253. | 250. | 260. | 258. | 263. | 258. | 262. | 268. |
| 16734 | 236. | 242. | 241. | 241. | 244. | 250. | 237. | 250. | 253. | 258. | 257. | 255. | 259. | 261. | 256. | |
| 16735 | 217. | 223. | 217. | 211. | 221. | 221. | 222. | 213. | 229. | 229. | 232. | 223. | 231. | 234. | 238. | |
| 16736 | 251. | 252. | 253. | 259. | 256. | 256. | 266. | 269. | 265. | 268. | 272. | 269. | 272. | 270. | 262. | 270. |
| 16737 | 235. | 245. | 242. | 246. | 249. | 253. | 258. | 254. | 261. | 261. | 264. | 257. | 261. | 264. | 269. | |
| 16738 | 233. | 244. | 242. | 246. | 241. | 245. | 254. | 255. | 247. | 254. | 260. | 260. | 254. | 259. | 262. | 265. |
| 16739 | 226. | 227. | 226. | 236. | 237. | 235. | 243. | 241. | 246. | 250. | 248. | 251. | 254. | 253. | 257. | 262. |
| 16740 | 244. | 255. | 257. | 259. | 257. | 254. | 263. | 268. | 268. | 259. | 269. | 267. | 268. | 261. | 268. | 275. |
| 16741 | 225. | 238. | 237. | 239. | 235. | 243. | 251. | 247. | 237. | 249. | 257. | 252. | 247. | 258. | 261. | 263. |
| 16742 | 240. | 238. | 240. | 247. | 245. | 241. | 249. | 252. | 251. | 244. | 252. | 253. | 253. | 247. | 259. | 262. |
| 16743 | 220. | 230. | 227. | 232. | 225. | 232. | 238. | 238. | 232. | 238. | 244. | 239. | 234. | 241. | 242. | 244. |
| 16744 | 244. | 252. | 253. | 253. | 254. | 254. | 261. | 262. | 261. | 263. | 266. | 265. | 260. | 263. | 271. | 273. |
| 16745 | 222. | 221. | 226. | 232. | 234. | 230. | 231. | 240. | 240. | 242. | 240. | 234. | 243. | 242. | 254. | |
| 16746 | 232. | 242. | 237. | 244. | 238. | 244. | 254. | 253. | 245. | 249. | 258. | 249. | 247. | 255. | 247. | 258. |
| 16747 | 222. | 232. | 229. | 228. | 230. | 237. | 243. | 236. | 240. | 246. | 244. | 241. | 243. | 245. | 251. | |
| 16748 | 241. | 235. | 244. | 244. | 242. | 242. | 247. | 250. | 247. | 244. | 252. | 258. | 252. | 249. | 262. | 269. |
| 16749 | 230. | 231. | 223. | 232. | 230. | 230. | 230. | 235. | 240. | 239. | 237. | 238. | 247. | 239. | | |
| 16750 | 239. | 253. | 253. | 263. | 255. | 265. | 277. | 275. | 275. | 278. | 283. | 281. | 282. | 285. | 291. | 297. |
| 16751 | 221. | 230. | 227. | 228. | 225. | 233. | 237. | 238. | 235. | 239. | 247. | 238. | 236. | 238. | 240. | 242. |
| 16752 | 242. | 244. | 251. | 253. | 251. | 248. | 261. | 266. | 262. | 262. | 274. | 275. | 275. | 266. | 276. | 281. |
| 16753 | 225. | 233. | 231. | 238. | 230. | 234. | 247. | 242. | 238. | 246. | 252. | 250. | 245. | 247. | 255. | 252. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 2): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP I | | 0 (CARRIER) MG/KG/DAY |
| 16731 | 237. | | |
| 16732 | | | |
| 16733 | 270. | | |
| 16734 | | | |
| 16735 | | | |
| 16736 | 272. | | |
| 16737 | | | |
| 16738 | | | |
| 16739 | 267. | 263. | 261. |
| 16740 | 276. | | |
| 16741 | | | |
| 16742 | 258. | | |
| 16743 | | | |
| 16744 | 278. | 281. | 285. |
| 16745 | | | |
| 16746 | | | |
| 16747 | | | |
| 16748 | 267. | | |
| 16749 | | | |
| 16750 | | | |
| 16751 | | | |
| 16752 | 280. | | |
| 16753 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 3): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | | 0.01 MG/KG/DAY | | | | | | | | | | |
| 16754 | 202. | 206. | 210. | 209. | 206. | 207. | 214. | 215. | 212. | 208. | 211. | 216. | 211. | 212. | 213. | 214. |
| 16755 | 263. | 268. | 268. | 276. | 271. | 278. | 290. | 288. | 279. | 290. | 299. | 294. | 290. | 294. | 303. | 304. |
| 16756 | 229. | 227. | 235. | 240. | 239. | 236. | 249. | 259. | 255. | 253. | 258. | 260. | 263. | 260. | 274. | 277. |
| 16757 | 230. | 232. | 237. | 242. | 238. | 237. | 249. | 251. | 253. | 249. | 256. | 260. | 260. | 255. | 268. | 273. |
| 16758 | 216. | 220. | 219. | 220. | 221. | 223. | 227. | 226. | 232. | 234. | 235. | 234. | 230. | 237. | 238. | |
| 16759 | 264. | 271. | 269. | 270. | 272. | 274. | 290. | 281. | 283. | 287. | 296. | 297. | 296. | 305. | 309. | 315. |
| 16760 | 236. | 241. | 239. | 239. | 244. | 246. | 249. | 250. | 252. | 251. | 254. | 251. | 256. | 258. | 263. | |
| 16761 | 230. | 230. | 227. | 238. | 234. | 234. | 236. | 243. | 245. | 245. | 243. | 248. | 251. | 248. | | |
| 16762 | 218. | 226. | 218. | 227. | 226. | 223. | 225. | 235. | 234. | 239. | 232. | 239. | 241. | 241. | | |
| 16763 | 246. | 257. | 256. | 263. | 258. | 262. | 274. | 279. | 276. | 281. | 284. | 288. | 272. | 278. | 288. | 285. |
| 16764 | 212. | 235. | 229. | 233. | 229. | 236. | 245. | 237. | 234. | 242. | 241. | 240. | 237. | 240. | 249. | 249. |
| 16765 | 226. | 234. | 239. | 239. | 237. | 247. | 245. | 250. | 243. | 249. | 254. | 253. | 247. | 253. | 264. | 262. |
| 16766 | 214. | 224. | 220. | 222. | 219. | 224. | 228. | 231. | 220. | 228. | 233. | 227. | 223. | 225. | 233. | 232. |
| 16767 | 230. | 253. | 245. | 254. | 256. | 256. | 260. | 267. | 273. | 267. | 268. | 272. | 269. | 268. | | |
| 16768 | 228. | 242. | 244. | 253. | 250. | 254. | 264. | 266. | 259. | 276. | 283. | 283. | 276. | 285. | 290. | 291. |
| 16769 | 235. | 247. | 244. | 249. | 248. | 257. | 258. | 265. | 260. | 267. | 266. | 268. | 264. | 269. | 280. | 278. |
| 16770 | 229. | 239. | 234. | 231. | 240. | 249. | 251. | 247. | 258. | 255. | 252. | 250. | 257. | 244. | 269. | |
| 16771 | 241. | 250. | 246. | 254. | 247. | 250. | 264. | 260. | 262. | 264. | 263. | 262. | 257. | 264. | 265. | 264. |
| 16772 | 227. | 227. | 226. | 229. | 230. | 231. | 236. | 241. | 241. | 240. | 244. | 243. | 242. | 241. | 251. | 253. |
| 16773 | 235. | 242. | 244. | 248. | 247. | 249. | 259. | 260. | 254. | 261. | 266. | 265. | 258. | 263. | 275. | 275. |
| 16774 | 218. | 228. | 229. | 233. | 226. | 234. | 243. | 238. | 237. | 245. | 256. | 250. | 245. | 250. | 253. | 255. |
| 16775 | 245. | 241. | 242. | 247. | 249. | 248. | 245. | 251. | 264. | 255. | 254. | 261. | 265. | 260. | 273. | 276. |
| 16776 | 235. | 241. | 241. | 241. | 240. | 245. | 251. | 252. | 246. | 251. | 252. | 252. | 248. | 252. | 265. | 263. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 4): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP II | | 0.01 MG/KG/DAY |
| 16754 | 212. | | |
| 16755 | | | |
| 16756 | 273. | | |
| 16757 | 270. | | |
| 16758 | | | |
| 16759 | 316. | 325. | 330. |
| 16760 | | | |
| 16761 | | | |
| 16762 | | | |
| 16763 | | | |
| 16764 | | | |
| 16765 | | | |
| 16766 | | | |
| 16767 | | | |
| 16768 | | | |
| 16769 | | | |
| 16770 | | | |
| 16771 | | | |
| 16772 | 253. | | |
| 16773 | | | |
| 16774 | | | |
| 16775 | 281. | 278. | 288. |
| 16776 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 5): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | | 0.1 MG/KG/DAY | | | | | | | | | | |
| 16777 | 208. | 206. | 209. | 212. | 211. | 209. | 218. | 222. | 220. | 219. | 226. | 226. | 225. | 224. | 231. | 238. |
| 16778 | 261. | 262. | 263. | 272. | 273. | 270. | 279. | 287. | 289. | 284. | 266. | 294. | 290. | 289. | 294. | 305. |
| 16779 | 229. | 229. | 235. | 237. | 237. | 234. | 244. | 242. | 246. | 246. | 250. | 249. | 250. | 248. | 249. | 251. |
| 16780 | 227. | 230. | 234. | 240. | 236. | 235. | 242. | 245. | 245. | 246. | 251. | 247. | 245. | 241. | 250. | 252. |
| 16781 | 210. | 216. | 221. | 221. | 219. | 220. | 233. | 238. | 232. | 231. | 239. | 239. | 240. | 240. | 246. | 241. |
| 16782 | 249. | 252. | 255. | 261. | 265. | 265. | 272. | 281. | 283. | 280. | 277. | 281. | 282. | 279. | | |
| 16783 | 233. | 228. | 233. | 238. | 233. | 231. | 243. | 246. | 245. | 243. | 245. | 250. | 248. | 244. | 250. | 253. |
| 16784 | 238. | 236. | 233. | 239. | 243. | 241. | 238. | 244. | 249. | 246. | 241. | 247. | 251. | 245. | | |
| 16785 | 216. | 213. | 218. | 219. | 223. | 224. | 229. | 235. | 231. | 231. | 235. | 237. | 234. | 235. | 243. | 247. |
| 16786 | 242. | 240. | 244. | 250. | 244. | 237. | 259. | 259. | 260. | 252. | 262. | 266. | 261. | 252. | | |
| 16787 | 226. | 235. | 234. | 242. | 238. | 246. | 258. | 260. | 252. | 257. | 266. | 262. | 260. | 270. | 276. | 276. |
| 16788 | 228. | 236. | 238. | 238. | 237. | 242. | 253. | 250. | 249. | 252. | 257. | 253. | 250. | 260. | 266. | 262. |
| 16789 | 223. | 222. | 228. | 228. | 228. | 233. | 243. | 241. | 241. | 235. | 242. | 240. | 241. | 240. | 253. | 260. |
| 16790 | 243. | 253. | 253. | 252. | 250. | 257. | 266. | 262. | 262. | 270. | 271. | 267. | 264. | 269. | 271. | |
| 16791 | 228. | 230. | 226. | 229. | 226. | 229. | 232. | 230. | 238. | 238. | 241. | 234. | 236. | 238. | 243. | |
| 16792 | 234. | 234. | 231. | 237. | 242. | 240. | 243. | 250. | 251. | 251. | 250. | 255. | 260. | 265. | | |
| 16793 | 213. | 223. | 221. | 226. | 221. | 230. | 235. | 235. | 234. | 238. | 239. | 237. | 236. | 240. | 252. | 245. |
| 16794 | 238. | 243. | 243. | 249. | 239. | 249. | 257. | 259. | 250. | 261. | 262. | 260. | 250. | 254. | 268. | 268. |
| 16795 | 225. | 222. | 228. | 234. | 234. | 229. | 243. | 247. | 246. | 243. | 252. | 257. | 251. | 249. | 255. | 264. |
| 16796 | 241. | 236. | 242. | 244. | 246. | 240. | 239. | 252. | 256. | 252. | 248. | 243. | 248. | 249. | 256. | |
| 16797 | 219. | 230. | 227. | 229. | 229. | 234. | 240. | 236. | 234. | 242. | 243. | 236. | 233. | 242. | 249. | 246. |
| 16798 | 240. | 246. | 250. | 250. | 251. | 258. | 261. | 260. | 254. | 261. | 267. | 261. | 257. | 263. | 272. | 269. |
| 16799 | 241. | 231. | 224. | 239. | 236. | 238. | 237. | 244. | 242. | 250. | 250. | 246. | 254. | 253. | 263. | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 6): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP III | | 0.1 MG/KG/DAY |
| 16777 | 231. | 240. | 230. |
| 16778 | | | |
| 16779 | 254. | | |
| 16780 | 252. | | |
| 16781 | 244. | | |
| 16782 | | | |
| 16783 | 250. | | |
| 16784 | | | |
| 16785 | 251. | 240. | 230. |
| 16786 | | | |
| 16787 | | | |
| 16788 | | | |
| 16789 | 258. | | |
| 16790 | | | |
| 16791 | | | |
| 16792 | | | |
| 16793 | | | |
| 16794 | | | |
| 16795 | 263. | | |
| 16796 | | | |
| 16797 | | | |
| 16798 | | | |
| 16799 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 7): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | | 1.0 MG/KG/DAY | | | | | | | | | | |
| 16800 | 217. | 225. | 224. | 230. | 226. | 222. | 229. | 228. | 220. | 216. | 225. | 226. | 228. | 217. | 228. | 238. |
| 16801 | 258. | 274. | 271. | 267. | 271. | 279. | 287. | 286. | 289. | 290. | 294. | 289. | 294. | 300. | 300. | |
| 16802 | 230. | 239. | 240. | 239. | 239. | 245. | 244. | 242. | 242. | 248. | 253. | 249. | 243. | 252. | 262. | 262. |
| 16803 | 231. | 228. | 236. | 240. | 242. | 236. | 247. | 253. | 254. | 246. | 257. | 260. | 257. | 252. | 264. | 267. |
| 16804 | 214. | 214. | 219. | 225. | 226. | 223. | 232. | 237. | 236. | 236. | 242. | 244. | 242. | 240. | 253. | 259. |
| 16805 | 255. | 255. | 263. | 271. | 270. | 266. | 277. | 280. | 281. | 275. | 282. | 280. | 285. | 274. | 288. | 290. |
| 16806 | 234. | 241. | 233. | 244. | 247. | 247. | 248. | 254. | 259. | 256. | 254. | 254. | 257. | 260. | | |
| 16807 | 233. | 230. | 235. | 239. | 238. | 236. | 241. | 246. | 249. | 242. | 239. | 247. | 252. | 252. | 252. | |
| 16808 | 218. | 226. | 226. | 223. | 221. | 229. | 234. | 238. | 234. | 242. | 243. | 239. | 237. | 239. | 240. | 249. |
| 16809 | 238. | 246. | 246. | 249. | 246. | 253. | 255. | 263. | 256. | 266. | 267. | 267. | 264. | 271. | 282. | 278. |
| 16810 | 227. | 228. | 230. | 239. | 240. | 239. | 245. | 247. | 252. | 247. | 252. | 254. | 250. | 249. | 267. | 268. |
| 16811 | 233. | 238. | 236. | 232. | 241. | 242. | 248. | 240. | 245. | 249. | 250. | 244. | 249. | 252. | 254. | |
| 16812 | 221. | 226. | 219. | 228. | 228. | 230. | 233. | 235. | 239. | 237. | 237. | 243. | 251. | 246. | | |
| 16813 | 243. | 250. | 254. | 253. | 250. | 263. | 264. | 264. | 257. | 266. | 270. | 265. | 262. | 271. | 261. | 265. |
| 16814 | 224. | 219. | 228. | 232. | 232. | 230. | 238. | 239. | 240. | 237. | 241. | 244. | 246. | 240. | 250. | 256. |
| 16815 | 237. | 246. | 246. | 249. | 246. | 247. | 259. | 254. | 257. | 254. | 256. | 257. | 260. | 260. | | |
| 16816 | 226. | 233. | 226. | 226. | 234. | 235. | 241. | 236. | 242. | 245. | 243. | 241. | 243. | 245. | 252. | |
| 16817 | 246. | 256. | 255. | 258. | 260. | 266. | 274. | 273. | 276. | 283. | 278. | 277. | 286. | 288. | 290. | |
| 16818 | 214. | 230. | 228. | 232. | 227. | 231. | 243. | 238. | 234. | 239. | 241. | 243. | 239. | 240. | 251. | 250. |
| 16819 | 244. | 243. | 226. | 252. | 255. | 255. | 249. | 258. | 264. | 265. | 255. | 265. | 265. | 269. | 279. | 272. |
| 16820 | 220. | 224. | 229. | 232. | 234. | 233. | 246. | 242. | 245. | 242. | 245. | 248. | 247. | 249. | 251. | 256. |
| 16821 | 243. | 234. | 242. | 241. | 237. | 234. | 245. | 252. | 250. | 246. | 253. | 256. | 247. | 248. | 260. | 267. |
| 16822 | 233. | 246. | 243. | 247. | 240. | 251. | 256. | 253. | 248. | 260. | 259. | 260. | 253. | 263. | 268. | 268. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 8): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | 1.0 MG/KG/DAY |
| 16800 | 239. | | |
| 16801 | | | |
| 16802 | | | |
| 16803 | 266. | | |
| 16804 | 251. | | |
| 16805 | 284. | | |
| 16806 | | | |
| 16807 | | | |
| 16808 | | | |
| 16809 | | | |
| 16810 | 270. | | |
| 16811 | | | |
| 16812 | | | |
| 16813 | | | |
| 16814 | 251. | | |
| 16815 | | | |
| 16816 | | | |
| 16817 | | | |
| 16818 | | | |
| 16819 | | | |
| 16820 | 254. | | |
| 16821 | 264. | | |
| 16822 | | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 9): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14a | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | | 30.0 MG/KG/DAY | | | | | | | | | | |
| 16823 | 215. | 218. | 216. | 213. | 220. | 222. | 224. | 217. | 221. | 230. | 227. | 222. | 225. | 230. | 229. | |
| 16824 | 258. | 272. | 271. | 279. | 270. | 278. | 288. | 287. | 278. | 287. | 287. | 290. | 289. | 292. | 302. | |
| 16825 | 228. | 232. | 234. | 240. | 237. | 232. | 244. | 249. | 246. | 244. | 247. | 252. | 249. | 246. | 250. | 254. |
| 16826 | 230. | 229. | 238. | 243. | 245. | 240. | 255. | 262. | 262. | 257. | 268. | 276. | 278. | 268. | 281. | 289. |
| 16827 | 212. | 221. | 221. | 221. | 219. | 225. | 228. | 225. | 223. | 227. | 227. | 225. | 224. | 231. | 238. | 232. |
| 16828 | 255. | 256. | 262. | 268. | 272. | 270. | 275. | 287. | 290. | 295. | 285. | 283. | 290. | 295. | 296. | 304. |
| 16829 | 230. | 241. | 239. | 243. | 244. | 250. | 259. | 260. | 256. | 268. | 269. | 271. | 265. | 274. | 273. | 282. |
| 16830 | 225. | 238. | 234. | 242. | 235. | 238. | 251. | 251. | 248. | 250. | 252. | 256. | 255. | 250. | | |
| 16831 | 222. | 220. | 224. | 232. | 231. | 229. | 237. | 242. | 242. | 238. | 247. | 246. | 245. | 242. | 252. | 256. |
| 16832 | 248. | 252. | 256. | 258. | 258. | 262. | 263. | 263. | 262. | 262. | 266. | 266. | 265. | 265. | 272. | 274. |
| 16833 | 209. | 235. | 237. | 242. | 237. | 244. | 253. | 253. | 246. | 255. | 263. | 261. | 252. | 258. | 269. | 272. |
| 16834 | 230. | 239. | 240. | 240. | 239. | 244. | 247. | 250. | 245. | 250. | 255. | 254. | 248. | 248. | 262. | 260. |
| 16835 | 216. | 228. | 230. | 234. | 229. | 237. | 247. | 246. | 239. | 246. | 252. | 249. | 246. | 252. | 260. | 265. |
| 16836 | 251. | 261. | 262. | 263. | 262. | 265. | 271. | 272. | 265. | 274. | 277. | 273. | 274. | 280. | 289. | 291. |
| 16837 | 226. | 230. | 235. | 233. | 232. | 237. | 243. | 241. | 241. | 242. | 250. | 249. | 243. | 248. | 261. | 260. |
| 16838 | 232. | 235. | 234. | 244. | 242. | 239. | 246. | 253. | 254. | 254. | 252. | 257. | 254. | 251. | 254. | 246. |
| 16839 | 217. | 229. | 230. | 231. | 227. | 234. | 239. | 239. | 234. | 238. | 240. | 237. | 235. | 236. | 240. | 244. |
| 16840 | 238. | 253. | 255. | 251. | 250. | 255. | 261. | 263. | 256. | 265. | 265. | 268. | 261. | 267. | 275. | 278. |
| 16841 | 228. | 237. | 233. | 233. | 234. | 238. | 244. | 240. | 243. | 246. | 244. | 240. | 242. | 246. | | |
| 16842 | 230. | 235. | 238. | 242. | 235. | 231. | 240. | 243. | 240. | 239. | 241. | 234. | 241. | 239. | 254. | 253. |
| 16843 | 226. | 232. | 233. | 235. | 237. | 238. | 244. | 247. | 241. | 249. | 250. | 248. | 244. | 240. | 252. | 257. |
| 16844 | 236. | 239. | 248. | 255. | 256. | 257. | 261. | 272. | 272. | 277. | 268. | 272. | 279. | 282. | 283. | 288. |
| 16845 | 226. | 226. | 228. | 235. | 233. | 234. | 239. | 244. | 242. | 243. | 244. | 252. | 246. | 246. | 255. | 257. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D30 (PAGE 10): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 17 | 18 | 19 |
|---|---|---|---|
| RAT # | DOSAGE GROUP V | | 30.0 MG/KG/DAY |
| 16823 | | | |
| 16824 | | | |
| 16825 | 251. | | |
| 16826 | 289. | | |
| 16827 | | | |
| 16828 | | | |
| 16829 | 281. | | |
| 16830 | | | |
| 16831 | 249. | | |
| 16832 | | | |
| 16833 | | | |
| 16834 | | | |
| 16835 | 267. | 280. | 281. |
| 16836 | | | |
| 16837 | | | |
| 16838 | 254. | | |
| 16839 | | | |
| 16840 | | | |
| 16841 | | | |
| 16842 | | | |
| 16843 | 254. | | |
| 16844 | | | |
| 16845 | 261. | | |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 1): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 P | 235. | 234. | 244. | 247. | 253. | 259. | 258. | 263. | 271. | 270. | 276. | 280. | 288. |
| 16732 P | 318. | 322. | 334. | 352. | 364. | 375. | 378. | 373. | 387. | 396. | 406. | 414. | 417. |
| 16734 P | 251. | 261. | 267. | 273. | 281. | 288. | 293. | 294. | 297. | 303. | 313. | 320. | 320. |
| 16735 P | 239. | 255. | 257. | 259. | 271. | 273. | 282. | 255. | 280. | 286. | 297. | 303. | 308. |
| 16736 P | 266. | 274. | 284. | 285. | 289. | 294. | 293. | 299. | 303. | 308. | 312. | 315. | 322. |
| 16737 P | 258. | 273. | 279. | 275. | 286. | 288. | 299. | 295. | 297. | 306. | 315. | 321. | 328. |
| 16738 P | 253. | 261. | 272. | 284. | 284. | 292. | 286. | 290. | 290. | 307. | 310. | 315. | 317. |
| 16740 P | 269. | 281. | 297. | 296. | 297. | 296. | 294. | 297. | 310. | 314. | 319. | 321. | 326. |
| 16741 P | 265. | 274. | 275. | 267. | 285. | 293. | 294. | 295. | 299. | 312. | 315. | 320. | 319. |
| 16742 P | 262. | 269. | 277. | 282. | 287. | 287. | 288. | 293. | 299. | 304. | 312. | 319. | 323. |
| 16745 P | 256. | 260. | 267. | 265. | 277. | 274. | 287. | 284. | 287. | 292. | 309. | 317. | 322. |
| 16746 P | 258. | 265. | 267. | 270. | 271. | 273. | 272. | 277. | 272. | 287. | 280. | 290. | 286. |
| 16747 P | 252. | 255. | 261. | 264. | 268. | 272. | 282. | 280. | 281. | 287. | 298. | 309. | 308. |
| 16749 P | 243. | 249. | 261. | 262. | 263. | 271. | 272. | 275. | 280. | 279. | 286. | 291. | 297. |
| 16750 P | 300. | 312. | 313. | 328. | 330. | 331. | 339. | 340. | 337. | 348. | 347. | 364. | 363. |
| 16753 P | 258. | 258. | 263. | 277. | 281. | 291. | 288. | 286. | 289. | 302. | 308. | 317. | 310. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 2): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 P | 291. | 296. | 298. | 302. | 313. | 319. | 333. | 348. | 370. | | | | |
| 16732 P | 426. | 430. | 441. | 446. | 465. | 476. | 495. | 499. | 522. | | | | |
| 16734 P | 320. | 328. | 333. | 339. | 352. | 369. | 389. | 409. | 418. | 438. | | | |
| 16735 P | 310. | 317. | 320. | 333. | 342. | 358. | 371. | 384. | 393. | | | | |
| 16736 P | 325. | 332. | 331. | 341. | 356. | 366. | 377. | 396. | 409. | | | | |
| 16737 P | 326. | 337. | 345. | 350. | 368. | 378. | 398. | 417. | 427. | | | | |
| 16738 P | 322. | 330. | 330. | 345. | 356. | 372. | 382. | 397. | 417. | | | | |
| 16740 P | 329. | 329. | 338. | 340. | 355. | 364. | 378. | 392. | 415. | | | | |
| 16741 P | 314. | 320. | 338. | 341. | 357. | 379. | 387. | 401. | 422. | | | | |
| 16742 P | 325. | 330. | 334. | 345. | 364. | 374. | 383. | 402. | 413. | | | | |
| 16745 P | 321. | 325. | 330. | 348. | 352. | 370. | 383. | 384. | 391. | | | | |
| 16746 P | 288. | 295. | 302. | 315. | 326. | 343. | 367. | 356. | | | | | |
| 16747 P | 311. | 322. | 326. | 332. | 349. | 362. | 376. | 391. | 401. | | | | |
| 16749 P | 300. | 307. | 315. | 327. | 340. | 359. | 371. | 392. | 408. | | | | |
| 16750 P | 370. | 367. | 384. | 390. | 402. | 420. | 444. | 445. | 472. | | | | |
| 16753 P | 318. | 321. | 338. | 334. | 352. | 366. | 381. | 390. | 402. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 3): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 P | 303. | 311. | 318. | 330. | 340. | 346. | 343. | 350. | 351. | 361. | 363. | 375. | 378. |
| 16758 P | 242. | 244. | 245. | 245. | 253. | 258. | 260. | 265. | 264. | 265. | 276. | 287. | 289. |
| 16760 P | 261. | 269. | 270. | 271. | 279. | 274. | 286. | 286. | 285. | 290. | 298. | 306. | 310. |
| 16761 P | 249. | 255. | 269. | 275. | 269. | 289. | 287. | 287. | 289. | 293. | 293. | 303. | 311. |
| 16762 P | 243. | 245. | 256. | 261. | 265. | 273. | 278. | 284. | 288. | 284. | 288. | 301. | 307. |
| 16763 P | 282. | 293. | 300. | 319. | 316. | 324. | 320. | 325. | 334. | 341. | 355. | 357. | 367. |
| 16764 P | 242. | 253. | 258. | 271. | 274. | 275. | 282. | 275. | 281. | 277. | 285. | 285. | 292. |
| 16765 P | 260. | 267. | 271. | 268. | 285. | 280. | 292. | 292. | 297. | 289. | 304. | 323. | 306. |
| 16767 P | 281. | 281. | 292. | 299. | 292. | 310. | 308. | 314. | 314. | 315. | 323. | 330. | 340. |
| 16768 P | 290. | 300. | 305. | 320. | 324. | 326. | 325. | 327. | 333. | 345. | 357. | 359. | 367. |
| 16769 P | 284. | 287. | 289. | 294. | 298. | 307. | 306. | 308. | 312. | 320. | 325. | 339. | 332. |
| 16770 P | 261. | 270. | 274. | 272. | 283. | 291. | 298. | 304. | 307. | 313. | 324. | 340. | 349. |
| 16771 P | 263. | 271. | 273. | 287. | 291. | 297. | 298. | 294. | 295. | 303. | 308. | 316. | 313. |
| 16773 P | 274. | 282. | 285. | 295. | 299. | 299. | 304. | 302. | 303. | 308. | 320. | 335. | 326. |
| 16774 P | 256. | 260. | 264. | 276. | 273. | 289. | 285. | 283. | 275. | 287. | 295. | 304. | 300. |
| 16776 P | 262. | 270. | 268. | 286. | 283. | 281. | 292. | 289. | 293. | 303. | 313. | 312. | 316. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 4): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 P | 382. | 385. | 396. | 410. | 418. | 438. | 455. | 467. | 493. | | | | |
| 16758 P | 286. | 295. | 305. | 306. | 317. | 333. | 349. | 359. | 372. | | | | |
| 16760 P | 309. | 314. | 318. | 328. | 339. | 346. | 366. | 382. | 395. | 396. | | | |
| 16761 P | 314. | 313. | 324. | 328. | 343. | 362. | 367. | 383. | 395. | | | | |
| 16762 P | 307. | 313. | 324. | 331. | 349. | 359. | 373. | 386. | 395. | | | | |
| 16763 P | 378. | 374. | 386. | 394. | 409. | 425. | 439. | 449. | 471. | | | | |
| 16764 P | 291. | 283. | 298. | 305. | 316. | 343. | 361. | 371. | 393. | | | | |
| 16765 P | 313. | 323. | 337. | 352. | 360. | 376. | 386. | 397. | 412. | | | | |
| 16767 P | 348. | 346. | 350. | 358. | 365. | 377. | 395. | 411. | 419. | | | | |
| 16768 P | 366. | 377. | 386. | 392. | 408. | 412. | 431. | 449. | 455. | | | | |
| 16769 P | 348. | 344. | 356. | 366. | 377. | 393. | 399. | 420. | 429. | | | | |
| 16770 P | 343. | 354. | 364. | 368. | 384. | 400. | 417. | 432. | 448. | | | | |
| 16771 P | 319. | 323. | 325. | 331. | 344. | 361. | 380. | 391. | 407. | | | | |
| 16773 P | 327. | 336. | 338. | 348. | 357. | 376. | 392. | 408. | 427. | | | | |
| 16774 P | 306. | 310. | 322. | 329. | 338. | 348. | 358. | 375. | 393. | | | | |
| 16776 P | 322. | 327. | 336. | 339. | 356. | 368. | 381. | 400. | 408. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 5): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 P | 240. | 247. | 255. | 257. | 263. | 269. | 273. | 271. | 277. | 286. | 286. | 284. | 287. |
| 16782 P | 290. | 294. | 307. | 305. | 309. | 327. | 329. | 331. | 332. | 340. | 341. | 355. | 362. |
| 16783 P | 245. | 254. | 267. | 268. | 272. | 276. | 276. | 281. | 291. | 302. | 302. | 308. | 311. |
| 16784 P | 253. | 249. | 263. | 266. | 274. | 286. | 290. | 296. | 296. | 305. | 306. | 318. | 310. |
| 16786 P | 248. | 257. | 276. | 280. | 285. | 302. | 302. | 313. | 306. | 312. | 316. | 327. | 340. |
| 16787 P | 273. | 285. | 287. | 305. | 297. | 316. | 318. | 306. | 317. | 322. | 328. | 336. | 338. |
| 16791 P | 232. | 242. | 247. | 248. | 257. | 257. | 265. | 274. | 270. | 276. | 277. | 284. | 293. |
| 16792 P | 266. | 264. | 274. | 280. | 280. | 292. | 293. | 297. | 303. | 297. | 303. | 316. | 321. |
| 16793 P | 252. | 257. | 259. | 266. | 267. | 279. | 274. | 279. | 283. | 292. | 302. | 303. | 305. |
| 16794 P | 262. | 270. | 271. | 288. | 287. | 294. | 289. | 293. | 297. | 308. | 306. | 312. | 318. |
| 16795 P | 264. | 276. | 283. | 293. | 296. | 295. | 297. | 298. | 311. | 320. | 321. | 322. | 331. |
| 16796 P | 262. | 267. | 272. | 276. | 289. | 288. | 297. | 299. | 298. | 304. | 311. | 322. | 326. |
| 16797 P | 247. | 261. | 255. | 273. | 270. | 268. | 275. | 280. | 278. | 282. | 291. | 300. | 296. |
| 16798 P | 273. | 280. | 285. | 299. | 298. | 304. | 302. | 303. | 309. | 314. | 319. | 326. | 328. |
| 16799 P | 265. | 276. | 277. | 280. | 294. | 295. | 306. | 307. | 304. | 307. | 316. | 332. | 330. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 6): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 P | 291. | 300. | 300. | 310. | 322. | 334. | 344. | 364. | 376. | | | | |
| 16782 P | 366. | 370. | 387. | 396. | 401. | 425. | 438. | 456. | 466. | | | | |
| 16783 P | 316. | 320. | 316. | 337. | 349. | 365. | 377. | 396. | 408. | | | | |
| 16784 P | 326. | 325. | 331. | 332. | 339. | 357. | 369. | 386. | 393. | | | | |
| 16786 P | 342. | 347. | 352. | 361. | 369. | 389. | 400. | 414. | 425. | | | | |
| 16787 P | 353. | 350. | 361. | 369. | 383. | 395. | 419. | 425. | 447. | | | | |
| 16791 P | 287. | 291. | 297. | 304. | 312. | 320. | 339. | 347. | 356. | | | | |
| 16792 P | 325. | 321. | 332. | 343. | 355. | 368. | 379. | 394. | 406. | | | | |
| 16793 P | 310. | 310. | 320. | 333. | 341. | 356. | 365. | 375. | 391. | | | | |
| 16794 P | 320. | 328. | 338. | 344. | 361. | 376. | 384. | 406. | 423. | | | | |
| 16795 P | 329. | 344. | 342. | 349. | 342. | 386. | 400. | 413. | 424. | | | | |
| 16796 P | 329. | 334. | 339. | 352. | 362. | 364. | 374. | 383. | 395. | | | | |
| 16797 P | 311. | 313. | 317. | 328. | 342. | 364. | 382. | 398. | 417. | | | | |
| 16798 P | 338. | 342. | 348. | 358. | 368. | 387. | 396. | 412. | 430. | 430. | | | |
| 16799 P | 326. | 334. | 343. | 354. | 367. | 380. | 387. | 404. | 407. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 7): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 P | 233. | 240. | 249. | 251. | 253. | 255. | 256. | 260. | 259. | 270. | 271. | 274. | 279. |
| 16801 P | 305. | 312. | 315. | 316. | 330. | 331. | 339. | 339. | 343. | 345. | 355. | 364. | 367. |
| 16802 P | 266. | 270. | 278. | 287. | 287. | 289. | 288. | 294. | 290. | 303. | 312. | 315. | 318. |
| 16803 P | 257. | 268. | 282. | 280. | 286. | 292. | 291. | 296. | 305. | 309. | 313. | 319. | 326. |
| 16805 P | 285. | 295. | 305. | 304. | 311. | 310. | 313. | 325. | 330. | 334. | 334. | 344. | 345. |
| 16806 P | 260. | 262. | 271. | 270. | 276. | 280. | 281. | 287. | 287. | 288. | 295. | 300. | 304. |
| 16807 P | 260. | 263. | 268. | 269. | 284. | 282. | 288. | 291. | 292. | 295. | 303. | 310. | 314. |
| 16808 P | 242. | 250. | 253. | 268. | 269. | 270. | 274. | 273. | 277. | 286. | 293. | 293. | 293. |
| 16810 P | 266. | 271. | 282. | 285. | 291. | 291. | 290. | 296. | 301. | 304. | 310. | 313. | 321. |
| 16811 P | 257. | 267. | 269. | 271. | 284. | 291. | 290. | 292. | 287. | 292. | 307. | 318. | 312. |
| 16814 P | 253. | 260. | 264. | 271. | 272. | 279. | 286. | 285. | 292. | 295. | 308. | 308. | 308. |
| 16815 P | 271. | 281. | 290. | 287. | 289. | 291. | 298. | 306. | 304. | 313. | 318. | 321. | 334. |
| 16817 P | 293. | 295. | 303. | 302. | 309. | 310. | 311. | 310. | 319. | 325. | 319. | 336. | 337. |
| 16818 P | 244. | 253. | 261. | 277. | 276. | 280. | 271. | 280. | 281. | 294. | 301. | 304. | 305. |
| 16820 P | 263. | 263. | 276. | 278. | 281. | 284. | 287. | 288. | 296. | 296. | 303. | 306. | 312. |
| 16822 P | 270. | 274. | 282. | 296. | 293. | 302. | 305. | 301. | 306. | 309. | 318. | 318. | 328. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 8): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | GROUP IV | | | 1.0 MG/KG/DAY | | | | | | |
| 16800 P | 278. | 286. | 290. | 301. | 317. | 327. | 342. | 358. | 369. | | | | |
| 16801 P | 368. | 383. | 393. | 406. | 418. | 434. | 449. | 471. | 491. | | | | |
| 16802 P | 320. | 320. | 334. | 338. | 353. | 368. | 380. | 395. | 416. | | | | |
| 16803 P | 330. | 339. | 342. | 351. | 365. | 376. | 389. | 408. | 421. | | | | |
| 16805 P | 349. | 354. | 354. | 363. | 382. | 399. | 419. | 431. | 451. | | | | |
| 16806 P | 308. | 308. | 315. | 325. | 345. | 355. | 373. | 393. | 408. | | | | |
| 16807 P | 318. | 326. | 334. | 349. | 355. | 371. | 390. | 408. | 420. | | | | |
| 16808 P | 301. | 304. | 316. | 322. | 328. | 346. | 363. | 370. | 392. | | | | |
| 16810 P | 325. | 332. | 333. | 341. | 358. | 372. | 389. | 408. | 419. | | | | |
| 16811 P | 316. | 328. | 328. | 343. | 351. | 360. | 385. | 391. | 400. | | | | |
| 16814 P | 311. | 317. | 326. | 331. | 349. | 355. | 361. | 379. | 401. | | | | |
| 16815 P | 339. | 344. | 352. | 362. | 376. | 395. | 404. | 433. | 441. | | | | |
| 16817 P | 337. | 341. | 346. | 359. | 374. | 389. | 405. | 420. | 435. | | | | |
| 16818 P | 309. | 314. | 325. | 331. | 346. | 355. | 375. | 390. | 410. | | | | |
| 16820 P | 312. | 317. | 321. | 330. | 343. | 358. | 374. | 390. | 406. | | | | |
| 16822 P | 328. | 335. | 337. | 345. | 356. | 371. | 382. | 393. | 408. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 9): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 P | 228. | 234. | 235. | 239. | 245. | 244. | 223. | 242. | 247. | 255. | 255. | 264. | 266. |
| 16825 P | 249. | 260. | 270. | 269. | 272. | 275. | 276. | 277. | 284. | 293. | 293. | 297. | 304. |
| 16826 P | 289. | 293. | 313. | 315. | 325. | 330. | 332. | 329. | 342. | 355. | 356. | 366. | 378. |
| 16827 P | 231. | 233. | 243. | 256. | 258. | 260. | 262. | 264. | 267. | 272. | 278. | 286. | 288. |
| 16828 P | 303. | 310. | 318. | 333. | 332. | 329. | 336. | 337. | 335. | 347. | 350. | 354. | 363. |
| 16830 P | 257. | 264. | 265. | 253. | 271. | 286. | 283. | 297. | 292. | 297. | 302. | 310. | 318. |
| 16831 P | 255. | 261. | 273. | 280. | 284. | 284. | 285. | 288. | 292. | 295. | 302. | 310. | 315. |
| 16833 P | 275. | 277. | 284. | 296. | 299. | 301. | 311. | 306. | 313. | 315. | 325. | 332. | 333. |
| 16834 P | 257. | 266. | 271. | 280. | 284. | 287. | 288. | 288. | 291. | 296. | 303. | 306. | 309. |
| 16836 P | 286. | 300. | 301. | 317. | 312. | 318. | 324. | 316. | 328. | 335. | 341. | 348. | 348. |
| 16837 P | 253. | 266. | 270. | 277. | 284. | 288. | 293. | 293. | 299. | 303. | 311. | 320. | 320. |
| 16839 P | 240. | 251. | 254. | 257. | 256. | 263. | 269. | 269. | 273. | 274. | 279. | 288. | 287. |
| 16840 P | 270. | 279. | 288. | 301. | 304. | 309. | 307. | 313. | 320. | 323. | 334. | 338. | 342. |
| 16842 P | 251. | 259. | 267. | 271. | 271. | 274. | 279. | 281. | 280. | 291. | 297. | 302. | 298. |
| 16843 P | 254. | 259. | 273. | 273. | 278. | 284. | 286. | 288. | 293. | 306. | 307. | 305. | 319. |
| 16844 P | 288. | 295. | 304. | 315. | 314. | 322. | 329. | 332. | 333. | 345. | 350. | 362. | 359. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D31 (PAGE 10): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAY 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 P | 268. | 276. | 281. | 288. | 299. | 311. | 329. | 329. | 349. | 351. | | | |
| 16825 P | 310. | 313. | 315. | 324. | 335. | 351. | 363. | 380. | 390. | | | | |
| 16826 P | 376. | 382. | 386. | 400. | 412. | 426. | 441. | 458. | 475. | | | | |
| 16827 P | 289. | 297. | 299. | 308. | 318. | 329. | 343. | 355. | 374. | 380. | | | |
| 16828 P | 367. | 373. | 379. | 393. | 405. | 424. | 439. | 455. | 467. | | | | |
| 16830 P | 317. | 326. | 334. | 343. | 362. | 371. | 388. | 407. | 413. | | | | |
| 16831 P | 321. | 327. | 333. | 338. | 351. | 368. | 385. | 402. | 419. | | | | |
| 16833 P | 339. | 342. | 354. | 362. | 372. | 390. | 409. | 428. | 448. | | | | |
| 16834 P | 317. | 317. | 328. | 333. | 344. | 358. | 370. | 385. | 402. | | | | |
| 16836 P | 359. | 358. | 372. | 380. | 392. | 411. | 427. | 444. | 457. | | | | |
| 16837 P | 331. | 342. | 349. | 357. | 368. | 389. | 403. | 422. | 443. | | | | |
| 16839 P | 294. | 297. | 305. | 313. | 320. | 337. | 350. | 368. | 386. | | | | |
| 16840 P | 352. | 351. | 364. | 366. | 381. | 393. | 401. | 418. | 430. | 438. | | | |
| 16842 P | 306. | 308. | 322. | 330. | 338. | 354. | 369. | 382. | 390. | | | | |
| 16843 P | 320. | 327. | 332. | 342. | 358. | 364. | 381. | 399. | 412. | | | | |
| 16844 P | 371. | 376. | 388. | 400. | 408. | 430. | 449. | 452. | 471. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAY = DAY OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 | 282. | 265. | 265. | 269. | 265. | 271. | 282. | 275. | 270. | 294. | 290. | 290. | 296. |
| 16732 | 384. | 377. | 378. | 378. | 375. | 376. | 378. | 378. | 373. | 371. | 387. | 374. | 370. |
| 16734 | 308. | 315. | 322. | 325. | 328. | 329. | 325. | 332. | 331. | 335. | 342. | 351. | 343. |
| 16735 | 288. | 282. | 276. | 285. | 286. | 249. | 295. | 293. | 300. | 297. | 312. | 312. | 318. |
| 16736 | 287. | 303. | 304. | 305. | 310. | 306. | 328. | 316. | 330. | 327. | 335. | 327. | 337. |
| 16737 | 302. | 294. | 301. | 306. | 314. | 316. | 341. | 335. | 346. | 351. | 357. | 360. | 359. |
| 16738 | 310. | 307. | 321. | 316. | 320. | 320. | 321. | 332. | 316. | 322. | 334. | 320. | 313. |
| 16740 | 298. | 290. | 291. | 291. | 290. | 293. | 302. | 295. | 310. | 317. | 329. | 315. | 328. |
| 16741 | 311. | 314. | 321. | 323. | 323. | 329. | 324. | 331. | 322. | 325. | 331. | 335. | 330. |
| 16742 | 309. | 301. | 314. | 311. | 315. | 316. | 317. | 322. | 323. | 328. | 333. | 330. | 339. |
| 16745 | 284. | 293. | 291. | 297. | 303. | 310. | 312. | 308. | 312. | 305. | 313. | 311. | 310. |
| 16746 | 281. | 290. | 286. | 283. | 284. | 301. | 300. | 301. | 312. | 303. | 310. | 306. | 321. |
| 16747 | 283. | 293. | 297. | 302. | 305. | 307. | 306. | 309. | 317. | 311. | 326. | 335. | 337. |
| 16749 | 285. | 293. | 297. | 294. | 307. | 300. | 296. | 293. | 295. | 309. | 311. | 314. | 319. |
| 16750 | 358. | 357. | 355. | 366. | 362. | 370. | 374. | 367. | 380. | 371. | 390. | 373. | 383. |
| 16753 | 312. | 285. | 287. | 290. | 286. | 292. | 297. | 304. | 303. | 304. | 308. | 308. | 305. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 2): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| | DAY 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | |
| 16731 | 296. | 298. | 308. | 312. | 312. | 284. | 288. | 307. | 279. |
| 16732 | 375. | 390. | 385. | 377. | 375. | 377. | 364. | 352. | 354. |
| 16734 | 347. | 344. | 362. | 347. | 354. | 350. | 329. | 323. | 330. |
| 16735 | 317. | 326. | 320. | 328. | 314. | 315. | 320. | 300. | 310. |
| 16736 | 339. | 342. | 342. | 346. | 313. | 330. | 342. | 336. | 331. |
| 16737 | 354. | 365. | 361. | 359. | 361. | 361. | 362. | 349. | 347. |
| 16738 | 320. | 333. | 339. | 327. | 346. | 333. | 335. | 335. | 333. |
| 16740 | 312. | 345. | 329. | 326. | 329. | 332. | 322. | 322. | 322. |
| 16741 | 342. | 338. | 355. | 348. | 356. | 363. | 356. | 352. | 360. |
| 16742 | 335. | 332. | 326. | 350. | 360. | 338. | 316. | 321. | 334. |
| 16745 | 309. | 320. | 326. | 323. | 327. | 328. | 334. | 321. | 330. |
| 16746 | 320. | 318. | 323. | 318. | 316. | 319. | 310. | 318. | 320. |
| 16747 | 336. | 325. | 346. | 339. | 326. | 337. | 338. | 327. | 322. |
| 16749 | 315. | 330. | 313. | 343. | 345. | 328. | 318. | 321. | 327. |
| 16750 | 403. | 385. | 390. | 391. | 392. | 389. | 380. | 366. | 362. |
| 16753 | 314. | 315. | 321. | 327. | 317. | 323. | 308. | 297. | 313. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 3): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 | 378. | 367. | 364. | 360. | 362. | 370. | 354. | 367. | 370. | 372. | 393. | 381. | 378. |
| 16758 | 271. | 278. | 278. | 286. | 282. | 285. | 295. | 295. | 295. | 297. | 307. | 310. | 309. |
| 16760 | 278. | 288. | 289. | 298. | 300. | 310. | 300. | 300. | 312. | 320. | 320. | 324. | 323. |
| 16761 | 300. | 298. | 301. | 305. | 286. | 305. | 309. | 308. | 315. | 303. | 316. | 315. | 325. |
| 16762 | 286. | 291. | 288. | 288. | 296. | 303. | 305. | 306. | 306. | 316. | 310. | 317. | 326. |
| 16763 | 357. | 353. | 370. | 371. | 385. | 396. | 382. | 395. | 386. | 391. | 413. | 404. | 395. |
| 16764 | 288. | 292. | 312. | 315. | 315. | 309. | 313. | 324. | 330. | 352. | 338. | 332. | 332. |
| 16765 | 304. | 303. | 310. | 320. | 312. | 316. | 310. | 326. | 337. | 330. | 333. | 329. | 325. |
| 16767 | 308. | 311. | 309. | 314. | 328. | 333. | 331. | 332. | 328. | 339. | 348. | 343. | 362. |
| 16768 | 346. | 360. | 354. | 359. | 359. | 366. | 360. | 361. | 359. | 375. | 389. | 396. | 395. |
| 16769 | 335. | 329. | 322. | 320. | 319. | 326. | 331. | 331. | 333. | 335. | 339. | 346. | 349. |
| 16770 | 346. | 348. | 342. | 348. | 343. | 352. | 357. | 341. | 347. | 350. | 354. | 351. | 358. |
| 16771 | 298. | 301. | 309. | 315. | 317. | 320. | 326. | 322. | 327. | 338. | 357. | 343. | 335. |
| 16773 | 314. | 318. | 322. | 324. | 324. | 335. | 321. | 333. | 341. | 339. | 350. | 362. | 356. |
| 16774 | 291. | 284. | 288. | 285. | 288. | 288. | 285. | 286. | 288. | 300. | 300. | 305. | 301. |
| 16776 | 301. | 305. | 312. | 314. | 315. | 324. | 318. | 320. | 322. | 337. | 340. | 337. | 328. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 4): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| | DAY 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | |
| 16755 | 381. | 387. | 378. | 382. | 386. | 382. | 368. | 361. | 372. |
| 16758 | 314. | 308. | 315. | 320. | 317. | 323. | 316. | 318. | 305. |
| 16760 | 332. | 331. | 330. | 334. | 339. | 323. | 324. | 332. | 322. |
| 16761 | 338. | 330. | 323. | 334. | 324. | 323. | 317. | 327. | 334. |
| 16762 | 318. | 315. | 319. | 339. | 324. | 321. | 330. | 332. | 282. |
| 16763 | 394. | 404. | 408. | 409. | 402. | 398. | 372. | 370. | 374. |
| 16764 | 336. | 357. | 356. | 344. | 362. | 365. | 347. | 337. | 359. |
| 16765 | 342. | 342. | 357. | 355. | 346. | 343. | 327. | 316. | 326. |
| 16767 | 361. | 360. | 356. | 357. | 354. | 362. | 326. | 338. | 342. |
| 16768 | 399. | 396. | 394. | 394. | 386. | 400. | 389. | 370. | 375. |
| 16769 | 343. | 347. | 357. | 342. | 352. | 339. | 347. | 346. | 350. |
| 16770 | 341. | 348. | 358. | 345. | 347. | 342. | 354. | 330. | 319. |
| 16771 | 346. | 357. | 360. | 363. | 347. | 350. | 339. | 327. | 324. |
| 16773 | 350. | 357. | 358. | 343. | 341. | 342. | 344. | 334. | 331. |
| 16774 | 311. | 317. | 308. | 319. | 323. | 303. | 309. | 304. | 311. |
| 16776 | 338. | 346. | 349. | 351. | 355. | 357. | 340. | 343. | 355. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 5): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 | 278. | 286. | 282. | 279. | 287. | 288. | 293. | 298. | 300. | 306. | 307. | 306. | 309. |
| 16782 | 333. | 342. | 347. | 355. | 361. | 366. | 348. | 355. | 364. | 364. | 369. | 362. | 369. |
| 16783 | 291. | 283. | 290. | 291. | 294. | 300. | 311. | 302. | 319. | 320. | 330. | 329. | 332. |
| 16784 | 304. | 311. | 302. | 301. | 300. | 301. | 310. | 293. | 297. | 309. | 315. | 306. | 319. |
| 16786 | 305. | 313. | 314. | 313. | 326. | 323. | 327. | 327. | 320. | 342. | 344. | 354. | 355. |
| 16787 | 341. | 340. | 351. | 341. | 354. | 359. | 342. | 360. | 356. | 369. | 369. | 369. | 369. |
| 16791 | 278. | 274. | 272. | 276. | 281. | 284. | 290. | 291. | 303. | 299. | 312. | 320. | 317. |
| 16792 | 313. | 319. | 321. | 311. | 311. | 318. | 309. | 314. | 316. | 320. | 330. | 315. | 319. |
| 16793 | 301. | 303. | 313. | 310. | 304. | 312. | 306. | 309. | 324. | 316. | 325. | 327. | 322. |
| 16794 | 297. | 313. | 316. | 322. | 321. | 323. | 313. | 314. | 328. | 324. | 333. | 333. | 344. |
| 16795 | 293. | 303. | 307. | 312. | 325. | 327. | 344. | 335. | 342. | 349. | 352. | 344. | 348. |
| 16796 | 324. | 311. | 308. | 311. | 314. | 319. | 320. | 332. | 322. | 333. | 332. | 340. | 338. |
| 16797 | 290. | 275. | 286. | 292. | 301. | 280. | 268. | 308. | 314. | 317. | 319. | 320. | 326. |
| 16798 | 313. | 312. | 320. | 324. | 331. | 336. | 341. | 330. | 340. | 352. | 352. | 346. | 350. |
| 16799 | 306. | 308. | 318. | 321. | 328. | 328. | 332. | 330. | 344. | 346. | 352. | 352. | 353. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 6): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| | DAY 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | |
| 16781 | 327. | 330. | 318. | 327. | 278. | 308. | 314. | 315. | 309. |
| 16782 | 375. | 380. | 399. | 380. | 386. | 387. | 371. | 360. | 355. |
| 16783 | 333. | 338. | 341. | 333. | 326. | 320. | 325. | 326. | 330. |
| 16784 | 312. | 321. | 308. | 313. | 322. | 319. | 328. | 329. | 337. |
| 16786 | 342. | 343. | 357. | 359. | 359. | 346. | 350. | 342. | 333. |
| 16787 | 367. | 370. | 383. | 375. | 366. | 378. | 349. | 333. | 357. |
| 16791 | 303. | 307. | 313. | 324. | 321. | 309. | 292. | 295. | 311. |
| 16792 | 329. | 328. | 317. | 310. | 318. | 322. | 324. | 308. | 295. |
| 16793 | 324. | 337. | 324. | 335. | 331. | 334. | 320. | 310. | 307. |
| 16794 | 341. | 341. | 342. | 351. | 338. | 352. | 335. | 308. | 330. |
| 16795 | 356. | 359. | 356. | 351. | 353. | 343. | 333. | 333. | 343. |
| 16796 | 332. | 334. | 346. | 334. | 346. | 342. | 326. | 349. | 332. |
| 16797 | 334. | 338. | 329. | 347. | 344. | 342. | 328. | 337. | 328. |
| 16798 | 355. | 362. | 358. | 354. | 344. | 338. | 339. | 345. | 340. |
| 16799 | 339. | 347. | 350. | 352. | 350. | 350. | 341. | 346. | 350. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 7): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 | 256. | 267. | 266. | 270. | 277. | 276. | 279. | 278. | 297. | 298. | 300. | 295. | 303. |
| 16801 | 378. | 368. | 369. | 367. | 367. | 376. | 377. | 376. | 377. | 392. | 388. | 389. | 401. |
| 16802 | 309. | 314. | 315. | 321. | 332. | 323. | 315. | 313. | 318. | 323. | 335. | 336. | 337. |
| 16803 | 295. | 307. | 307. | 313. | 322. | 328. | 328. | 328. | 321. | 335. | 338. | 334. | 334. |
| 16805 | 326. | 335. | 342. | 348. | 348. | 338. | 351. | 347. | 349. | 360. | 362. | 362. | 368. |
| 16806 | 290. | 289. | 298. | 303. | 313. | 318. | 318. | 322. | 306. | 323. | 326. | 318. | 319. |
| 16807 | 298. | 307. | 306. | 309. | 299. | 305. | 314. | 307. | 318. | 314. | 318. | 332. | 322. |
| 16808 | 287. | 288. | 298. | 299. | 303. | 301. | 293. | 306. | 301. | 304. | 319. | 318. | 316. |
| 16810 | 323. | 311. | 318. | 324. | 327. | 321. | 321. | 322. | 333. | 338. | 332. | 342. | 349. |
| 16811 | 297. | 296. | 301. | 305. | 300. | 303. | 308. | 308. | 309. | 311. | 313. | 321. | 317. |
| 16814 | 296. | 306. | 318. | 319. | 317. | 316. | 314. | 316. | 314. | 323. | 311. | 312. | 321. |
| 16815 | 300. | 335. | 338. | 336. | 343. | 352. | 349. | 350. | 351. | 346. | 371. | 355. | 367. |
| 16817 | 321. | 328. | 323. | 329. | 330. | 325. | 327. | 325. | 328. | 345. | 334. | 350. | 344. |
| 16818 | 286. | 296. | 311. | 314. | 309. | 326. | 316. | 322. | 320. | 334. | 332. | 328. | 333. |
| 16820 | 304. | 290. | 301. | 303. | 302. | 294. | 301. | 310. | 308. | 321. | 318. | 322. | 337. |
| 16822 | 323. | 318. | 316. | 328. | 322. | 322. | 322. | 328. | 336. | 326. | 341. | 340. | 342. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 8): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| | DAY 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | |
| 16800 | 314. | 311. | 305. | 314. | 308. | 298. | 311. | 305. | 308. |
| 16801 | 400. | 400. | 404. | 405. | 385. | 403. | 384. | 390. | 385. |
| 16802 | 349. | 348. | 345. | 347. | 353. | 342. | 335. | 313. | 335. |
| 16803 | 340. | 333. | 333. | 325. | 313. | 318. | 311. | 326. | 316. |
| 16805 | 368. | 366. | 374. | 378. | 364. | 364. | 368. | 360. | 365. |
| 16806 | 321. | 323. | 316. | 332. | 322. | 326. | 319. | 314. | 321. |
| 16807 | 334. | 319. | 339. | 339. | 336. | 343. | 327. | 292. | 300. |
| 16808 | 311. | 320. | 327. | 320. | 334. | 330. | 317. | 311. | 323. |
| 16810 | 359. | 357. | 354. | 356. | 368. | 356. | 349. | 345. | 342. |
| 16811 | 314. | 305. | 315. | 318. | 315. | 323. | 302. | 298. | 304. |
| 16814 | 316. | 328. | 316. | 323. | 319. | 314. | 306. | 295. | 300. |
| 16815 | 362. | 350. | 354. | 353. | 368. | 363. | 354. | 338. | 336. |
| 16817 | 355. | 361. | 345. | 361. | 357. | 363. | 367. | 355. | 343. |
| 16818 | 348. | 334. | 340. | 336. | 327. | 335. | 319. | 306. | 292. |
| 16820 | 326. | 328. | 332. | 339. | 336. | 321. | 320. | 331. | 312. |
| 16822 | 335. | 335. | 356. | 352. | 354. | 351. | 344. | 324. | 331. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D32 (PAGE 9): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 | 248. | 241. | 235. | 242. | 245. | 249. | 257. | 245. | 257. | 268. | 271. | 277. | 267. |
| 16825 | 289. | 301. | 298. | 297. | 303. | 305. | 311. | 300. | 313. | 316. | 320. | 322. | 323. |
| 16826 | 336. | 342. | 348. | 344. | 356. | 349. | 355. | 347. | 355. | 370. | 365. | 351. | 370. |
| 16827 | 268. | 279. | 286. | 283. | 287. | 288. | 300. | 295. | 304. | 321. | 322. | 312. | 314. |
| 16828 | 341. | 347. | 360. | 356. | 345. | 352. | 347. | 336. | 345. | 361. | 364. | 369. | 375. |
| 16830 | 300. | 291. | 302. | 310. | 314. | 320. | 319. | 325. | 320. | 330. | 331. | 335. | 340. |
| 16831 | 307. | 305. | 317. | 318. | 320. | 316. | 325. | 320. | 323. | 339. | 332. | 338. | 342. |
| 16833 | 329. | 328. | 328. | 331. | 325. | 329. | 323. | 330. | 330. | 342. | 341. | 347. | 339. |
| 16834 | 292. | 287. | 296. | 300. | 305. | 307. | 310. | 312. | 314. | 320. | 329. | 331. | 334. |
| 16836 | 328. | 331. | 337. | 344. | 343. | 345. | 342. | 352. | 354. | 356. | 368. | 359. | 345. |
| 16837 | 310. | 317. | 315. | 316. | 319. | 327. | 328. | 336. | 326. | 333. | 339. | 342. | 347. |
| 16839 | 278. | 280. | 290. | 300. | 289. | 292. | 287. | 291. | 300. | 310. | 313. | 315. | 319. |
| 16840 | 324. | 334. | 332. | 342. | 344. | 343. | 341. | 347. | 346. | 362. | 367. | 364. | 369. |
| 16842 | 410. | 298. | 300. | 309. | 303. | 310. | 313. | 305. | 318. | 315. | 324. | 319. | 328. |
| 16843 | 295. | 309. | 307. | 317. | 318. | 313. | 317. | 313. | 329. | 324. | 317. | 330. | 333. |
| 16844 | 363. | 352. | 366. | 367. | 370. | 382. | 368. | 375. | 381. | 385. | 383. | 396. | 391. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE D32 (PAGE 10): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| | DAY 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | |
| 16823 | 272. | 268. | 263. | 289. | 281. | 294. | 288. | 278. | 281. |
| 16825 | 334. | 337. | 335. | 333. | 338. | 327. | 318. | 311. | 336. |
| 16826 | 382. | 374. | 365. | 369. | 372. | 355. | 351. | 362. | 354. |
| 16827 | 324. | 319. | 329. | 329. | 336. | 304. | 292. | 298. | 297. |
| 16828 | 383. | 381. | 376. | 372. | 352. | 373. | 369. | 365. | 354. |
| 16830 | 340. | 338. | 335. | 348. | 340. | 344. | 335. | 335. | 328. |
| 16831 | 353. | 348. | 337. | 348. | 355. | 350. | 336. | 350. | 361. |
| 16833 | 350. | 345. | 357. | 353. | 360. | 353. | 348. | 337. | 324. |
| 16834 | 338. | 343. | 342. | 336. | 338. | 348. | 340. | 324. | 324. |
| 16836 | 366. | 354. | 367. | 372. | 367. | 377. | 361. | 358. | 352. |
| 16837 | 353. | 355. | 360. | 368. | 353. | 360. | 369. | 363. | 352. |
| 16839 | 323. | 328. | 332. | 337. | 336. | 326. | 323. | 316. | 328. |
| 16840 | 375. | 369. | 368. | 375. | 373. | 356. | 339. | 349. | 336. |
| 16842 | 336. | 323. | 326. | 336. | 330. | 339. | 330. | 325. | 312. |
| 16843 | 337. | 355. | 348. | 339. | 340. | 324. | 312. | 314. | 326. |
| 16844 | 393. | 411. | 396. | 389. | 387. | 404. | 381. | 374. | 372. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE D33 (PAGE 1): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 | 21. | 29. | 27. | 27. | 17. | 27. | 32. | 28. | 22. | 28. | 26. | 26. | 16. |
| 16732 | 30. | 38. | 29. | 25. | 41. | 38. | 35. | 28. | 44. | 40. | 34. | 26. | 44. |
| 16733 | 26. | 29. | 25. | 19. | 27. | 29. | 25. | 19. | 21. | 28. | 26. | 27. | 22. |
| 16734 | 25. | 22. | 26. | 24. | 26. | 19. | 24. | 25. | 27. | 25. | 19. | 27. | 29. |
| 16735 | 23. | 24. | 19. | 35. | 22. | 22. | 13. | 29. | 26. | 25. | 17. | 28. | 28. |
| 16736 | 34. | 42. | 49. | 41. | 33. | 37. | 45. | 42. | 43. | 46. | 46. | 40. | 36. |
| 16737 | 33. | 31. | 30. | 32. | 33. | 27. | 23. | 29. | 27. | 25. | 24. | 30. | 28. |
| 16738 | 27. | 31. | 29. | 19. | 25. | 23. | 29. | 17. | 24. | 26. | 27. | 22. | 32. |
| 16739 | 24. | 30. | 28. | 34. | 23. | 28. | 24. | 28. | 24. | 28. | 28. | 26. | 23. |
| 16740 | 29. | 34. | 33. | 33. | 26. | 30. | 32. | 30. | 23. | 33. | 34. | 33. | 20. |
| 16741 | 36. | 39. | 42. | 31. | 33. | 37. | 32. | 21. | 44. | 43. | 42. | 44. | 41. |
| 16742 | 24. | 35. | 29. | 32. | 17. | 34. | 27. | 26. | 21. | 31. | 30. | 36. | 16. |
| 16743 | 24. | 24. | 24. | 22. | 26. | 27. | 21. | 17. | 26. | 25. | 23. | 20. | 29. |
| 16744 | 30. | 35. | 33. | 24. | 26. | 36. | 33. | 25. | 30. | 35. | 32. | 40. | 31. |
| 16745 | b | 34. | 35. | b | 51. | 24. | b | b | b | b | b | 33. | b |
| 16746 | 34. | 36. | 42. | 31. | 39. | 38. | 39. | 27. | 35. | 40. | 36. | 37. | 33. |
| 16747 | 21. | 21. | 20. | 22. | 23. | 23. | 20. | 20. | 27. | 23. | 20. | 23. | 24. |
| 16748 | 18. | 30. | 24. | 24. | 16. | 26. | 27. | 20. | 20. | 25. | 24. | 20. | 18. |
| 16749 | 27. | 23. | 30. | 26. | 24. | 22. | 26. | 31. | 23. | 22. | 28. | 27. | 19. |
| 16750 | 44. | 37. | 36. | 26. | 32. | 34. | 30. | 28. | 29. | 37. | 31. | 34. | 28. |
| 16751 | 30. | 37. | 25. | 23. | 27. | 29. | 30. | 24. | 32. | 36. | 37. | 20. | 41. |
| 16752 | 27. | 35. | 31. | 30. | 24. | 32. | 33. | 31. | 25. | 36. | 30. | 29. | 26. |
| 16753 | 27. | 34. | 34. | 22. | 30. | 33. | 30. | 20. | 27. | 34. | 32. | 24. | 38. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE D33 (PAGE 2): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16754 | 38. | 47. | 41. | 37. | 34. | 43. | 50. | 45. | 44. | 46. | 51. | 46. | 39. |
| 16755 | 25. | 29. | 30. | 21. | 29. | 30. | 29. | 18. | 28. | 34. | 29. | 25. | 25. |
| 16756 | 38. | 37. | b | 34. | 36. | 50. | 43. | 33. | 28. | 47. | 36. | 35. | 24. |
| 16757 | 23. | 30. | 31. | 26. | 19. | 30. | 30. | 27. | 23. | 32. | 32. | 27. | 18. |
| 16758 | 24. | 28. | 25. | 43. | 26. | 26. | 25. | 24. | 26. | 25. | 26. | 31. | 41. |
| 16759 | 27. | 27. | 23. | 39. | 24. | 36. | 29. | 21. | 25. | 33. | 30. | 40. | 32. |
| 16760 | 35. | 47. | 45. | 46. | 31. | 35. | 28. | 33. | 47. | 40. | 31. | 50. | 30. |
| 16761 | 28. | 34. | 44. | 38. | 31. | 28. | 35. | 35. | 33. | 28. | 32. | 44. | 25. |
| 16762 | 25. | 18. | 27. | 23. | 22. | 17. | 27. | 25. | 26. | 17. | 28. | 27. | 26. |
| 16763 | 32. | 35. | 36. | 27. | 35. | 36. | 37. | 32. | 34. | 43. | 43. | 31. | 33. |
| 16764 | 34. | 31. | 31. | 26. | 28. | 31. | 28. | 28. | 29. | 28. | 30. | 35. | 35. |
| 16765 | b | b | b | c | b | 55. | b | b | b | b | b | b | b |
| 16766 | 26. | 25. | 24. | 22. | 27. | 30. | 24. | 15. | 28. | 26. | 24. | 30. | 23. |
| 16767 | 39. | 27. | 35. | 31. | 31. | 25. | 33. | 33. | 30. | 30. | 34. | 42. | 29. |
| 16768 | 37. | 50. | 37. | 33. | 37. | 40. | 34. | 29. | 43. | 43. | 41. | 43. | 37. |
| 16769 | 36. | 42. | 47. | 31. | 38. | 39. | 40. | 29. | 34. | 43. | 33. | 31. | 38. |
| 16770 | 35. | 33. | 27. | 37. | 35. | 26. | 21. | 32. | 27. | 40. | 31. | 44. | 1. |
| 16771 | 28. | 29. | 30. | 24. | 25. | 35. | 29. | 23. | 27. | 29. | 26. | 24. | 24. |
| 16772 | 19. | 27. | 31. | 21. | 27. | 27. | 30. | 26. | 19. | 27. | 25. | 24. | 18. |
| 16773 | 27. | 37. | 34. | 24. | 30. | 38. | 33. | 25. | 33. | 34. | 32. | 22. | 31. |
| 16774 | b | 26. | 29. | 21. | 30. | 35. | 27. | 18. | 25. | 45. | 29. | 26. | 33. |
| 16775 | 25. | 25. | 30. | 37. | 24. | 24. | 30. | 32. | 26. | 25. | 31. | 30. | 30. |
| 16776 | 31. | 44. | 41. | 30. | 29. | 44. | 40. | 26. | 34. | 37. | 40. | 34. | 31. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.
c. Value was not recorded.

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TABLE D33 (PAGE 3): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16777 | 23. | 31. | 31. | 29. | 25. | 32. | 29. | 28. | 25. | 38. | 38. | 32. | 25. |
| 16778 | 21. | 29. | 31. | 30. | 22. | 29. | 32. | 27. | 23. | b | 36. | 30. | 21. |
| 16779 | 32. | 37. | 39. | 31. | 26. | 35. | 34. | 33. | 40. | 38. | 36. | 38. | 28. |
| 16780 | 37. | 43. | b | 43. | 33. | 43. | 49. | 42. | 40. | 46. | 42. | 45. | 26. |
| 16781 | 34. | 46. | 41. | 29. | 30. | 43. | 44. | 33. | 35. | 47. | 50. | 51. | 40. |
| 16782 | 30. | 36. | 44. | 35. | 30. | 36. | 38. | 35. | 36. | 46. | 42. | 55. | 33. |
| 16783 | 20. | 29. | 31. | 23. | 17. | 30. | 28. | 22. | 21. | 26. | 29. | 30. | 20. |
| 16784 | 38. | 28. | 37. | 42. | 31. | 31. | 39. | 39. | 36. | 31. | 42. | 45. | 31. |
| 16785 | 23. | 26. | 28. | 27. | 29. | 28. | 32. | 28. | 26. | 29. | 29. | 30. | 26. |
| 16786 | 22. | 33. | 33. | 41. | 15. | 44. | 52. | 45. | 21. | 33. | 36. | 33. | 27. |
| 16787 | 32. | 34. | 39. | 27. | 33. | 32. | 32. | 26. | 34. | 36. | 33. | 31. | 28. |
| 16788 | 27. | 36. | 31. | 27. | 32. | 38. | 36. | 29. | 29. | 41. | 32. | 29. | 29. |
| 16789 | 30. | b | b | 57. | 42. | b | b | 43. | b | b | b | 38. | 23. |
| 16790 | 34. | 30. | 28. | 23. | 33. | 30. | 31. | 26. | 30. | 34. | 33. | 30. | 32. |
| 16791 | 35. | 30. | 30. | 27. | 25. | 27. | 23. | 29. | 29. | 29. | 29. | 18. | 14. |
| 16792 | 34. | 29. | 45. | 44. | 30. | 36. | 39. | 41. | 36. | 33. | 37. | 44. | 33. |
| 16793 | 23. | 28. | b | 23. | 22. | 27. | 25. | 21. | 28. | 29. | 23. | 25. | 31. |
| 16794 | 30. | 35. | 38. | 19. | 29. | 33. | 30. | 18. | 28. | 32. | 31. | 28. | 24. |
| 16795 | 25. | 32. | 33. | 31. | 22. | 34. | 30. | 32. | 23. | 32. | 30. | 32. | 24. |
| 16796 | b | 28. | 31. | 30. | 13. | 22. | 31. | 30. | 29. | 25. | 17. | 28. | 24. |
| 16797 | b | 47. | b | 53. | 32. | b | b | b | 41. | 46. | 54. | 45. | 55. |
| 16798 | 23. | 16. | 16. | 20. | 22. | 25. | 23. | 17. | 23. | 27. | 21. | 21. | 20. |
| 16799 | 20. | 20. | b | 45. | 35. | 24. | 39. | 32. | 46. | 30. | 27. | 53. | 35. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE D33 (PAGE 4): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 | 32. | 39. | 37. | 39. | 32. | 30. | 30. | 22. | 28. | 29. | 33. | 34. | 22. |
| 16801 | 44. | 38. | 39. | 39. | 37. | 36. | 32. | 34. | 37. | 33. | 37. | 34. | 28. |
| 16802 | 29. | 34. | 34. | 30. | 22. | 29. | 26. | 21. | 28. | 31. | 28. | 32. | 27. |
| 16803 | 27. | 39. | 38. | 35. | 24. | 34. | 34. | 30. | 21. | 41. | 48. | 40. | b |
| 16804 | 22. | 29. | 43. | 36. | 20. | 40. | 30. | 34. | 23. | 36. | 35. | 38. | 18. |
| 16805 | 26. | 38. | 35. | 34. | 25. | 33. | 37. | 31. | 26. | 32. | 17. | 50. | 25. |
| 16806 | 35. | 28. | 33. | 32. | 32. | 26. | 31. | 33. | 36. | 30. | 45. | 29. | 32. |
| 16807 | 21. | 29. | 29. | 37. | 21. | 28. | 35. | 33. | 26. | 24. | 32. | 40. | 34. |
| 16808 | 38. | 46. | 29. | 27. | 34. | 38. | 36. | 23. | 34. | 30. | 34. | 25. | c |
| 16809 | 26. | 32. | 26. | 20. | 23. | 29. | 25. | 23. | 29. | 32. | 31. | 30. | 26. |
| 16810 | 22. | 32. | 30. | 28. | 30. | 41. | 47. | 40. | 37. | 37. | 41. | 38. | c |
| 16811 | 27. | 25. | 33. | 27. | 27. | 27. | 20. | 25. | 27. | 29. | 21. | 26. | 30. |
| 16812 | 26. | 22. | 30. | 35. | 26. | 30. | 33. | 36. | 28. | 28. | 32. | 32. | 28. |
| 16813 | 27. | 27. | 22. | 18. | 27. | 28. | 25. | 20. | 32. | 30. | 31. | 22. | 21. |
| 16814 | 13. | 27. | 22. | 23. | 12. | 25. | 24. | 24. | 20. | 24. | 24. | 24. | 14. |
| 16815 | 29. | 35. | 36. | 23. | 20. | 34. | 33. | 31. | 31. | 24. | 31. | 40. | 23. |
| 16816 | 26. | 25. | 24. | 35. | 24. | 26. | 20. | 28. | 33. | 29. | 20. | 38. | 30. |
| 16817 | 32. | 34. | 34. | 31. | 31. | 30. | 27. | 28. | 27. | 27. | 27. | 32. | 33. |
| 16818 | 24. | 30. | 31. | 23. | 26. | 31. | 29. | 20. | 28. | 32. | 26. | 24. | 24. |
| 16819 | 1. | 1. | 42. | 33. | 25. | 22. | 27. | 30. | 27. | 20. | 26. | 26. | 21. |
| 16820 | 25. | 35. | 35. | 32. | 22. | 32. | 35. | 30. | 23. | 28. | 32. | 32. | 24. |
| 16821 | 24. | 36. | 41. | 34. | 12. | 42. | 36. | 32. | 29. | 37. | 39. | 40. | 20. |
| 16822 | 29. | 27. | 28. | 23. | 27. | 29. | 28. | 23. | 30. | 30. | 29. | 22. | 30. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value was incorrectly recorded and was excluded from group averages and statistical analyses.
c. Value not tabulated due to spillage or presumed spillage.

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TABLE D33 (PAGE 5): WATER CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 | 49. | 55. | 34. | 55. | 51. | 40. | 46. | 56. | b | 45. | b | c | b |
| 16824 | 37. | 36. | 45. | 30. | 35. | 42. | 37. | 30. | 37. | 40. | 46. | 43. | 32. |
| 16825 | 28. | 28. | 35. | 25. | 17. | 35. | 30. | 27. | 24. | 36. | 38. | 29. | 28. |
| 16826 | 18. | 30. | 34. | 27. | 22. | 33. | 31. | 27. | 24. | 29. | 32. | 34. | 20. |
| 16827 | 24. | 31. | 24. | 23. | b | 26. | 21. | 21. | 22. | 32. | 25. | 25. | 23. |
| 16828 | 25. | 41. | 37. | 32. | b | 30. | 37. | 33. | 37. | 29. | 32. | 47. | 33. |
| 16829 | 32. | 33. | 29. | 26. | 28. | 32. | 30. | 27. | 33. | 34. | 36. | 40. | 26. |
| 16830 | 29. | 36. | 37. | 29. | 31. | 37. | 37. | 32. | 36. | 34. | 38. | 49. | 27. |
| 16831 | 25. | 30. | 32. | 27. | 21. | 30. | 31. | 29. | 31. | 30. | 36. | 36. | 22. |
| 16832 | 23. | 34. | 28. | 20. | 26. | 26. | 25. | 23. | 27. | 46. | 30. | 30. | 36. |
| 16833 | 33. | 35. | 30. | 21. | 29. | 33. | 28. | 20. | 31. | 29. | 32. | 24. | 26. |
| 16834 | 28. | 27. | 23. | 21. | 23. | 27. | 23. | 20. | 22. | 29. | 24. | 22. | 22. |
| 16835 | 32. | 35. | 37. | 33. | 29. | 40. | 38. | 27. | 32. | 38. | 38. | 34. | 26. |
| 16836 | b | b | 36. | b | b | b | 26. | 20. | 28. | 50. | 45. | c | b |
| 16837 | 12. | 16. | 7. | 20. | 29. | 37. | 16. | 30. | 12. | 13. | 36. | 23. | 25. |
| 16838 | 20. | 31. | 35. | 34. | 26. | 33. | 39. | 34. | b | 32. | 37. | 41. | 31. |
| 16839 | 28. | 31. | 34. | 34. | 27. | 35. | 29. | 24. | 31. | 28. | 27. | 33. | 31. |
| 16840 | 26. | 30. | 25. | 19. | 26. | 28. | 23. | 18. | 30. | 31. | 23. | 19. | 28. |
| 16841 | 29. | 32. | 32. | 32. | 30. | 35. | 25. | 31. | 31. | 35. | 29. | 34. | 33. |
| 16842 | 29. | 34. | 32. | 23. | 23. | 34. | 28. | 34. | 27. | 38. | 42. | 46. | 33. |
| 16843 | 30. | 34. | 33. | 31. | 36. | 33. | 35. | 28. | 41. | 35. | 34. | 35. | 22. |
| 16844 | 17. | 28. | 33. | 32. | 23. | 24. | 28. | 30. | 29. | 31. | 23. | 35. | 36. |
| 16845 | 3. | 23. | 30. | 25. | 22. | 22. | 28. | 23. | 26. | 25. | 26. | 23. | 22. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Value not tabulated due to spillage or presumed spillage.
c. Value was not recorded.

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TABLE D34 (PAGE 1): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 P | 27. | 34. | 42. | 36. | 39. | 34. | 43. | 45. | 45. | 50. | 41. | 48. | 47. |
| 16732 P | 31. | 69. | 56. | a | 51. | 62. | 56. | 85. | a | a | a | 59. | a |
| 16734 P | 31. | 25. | 41. | 34. | 46. | 36. | 42. | 42. | 36. | 44. | 38. | 45. | 37. |
| 16735 P | 32. | 25. | 24. | 39. | 45. | 37. | 21. | 54. | 35. | 47. | 47. | 45. | 37. |
| 16736 P | 44. | 44. | 59. | 54. | 58. | 49. | 62. | 57. | 59. | a | 60. | a | a |
| 16737 P | 37. | 34. | 40. | 46. | 64. | 58. | 44. | 59. | 42. | 48. | 48. | 52. | 44. |
| 16738 P | 28. | 35. | 42. | 54. | 38. | 39. | 42. | 38. | 41. | 41. | 48. | 47. | 48. |
| 16740 P | 36. | 43. | 47. | 38. | 38. | 38. | 38. | 47. | 50. | 63. | 42. | 51. | 50. |
| 16741 P | 36. | 35. | 25. | 35. | 50. | 53. | a | 70. | 63. | 62. | a | 61. | 59. |
| 16742 P | 31. | 39. | 38. | 42. | 34. | 31. | 45. | 38. | 43. | 45. | 44. | 44. | 50. |
| 16745 P | a | a | 37. | 52. | 46. | 47. | a | 49. | 53. | 61. | a | a | 45. |
| 16746 P | 37. | 53. | 63. | 56. | 55. | 52. | 57. | 47. | 50. | 46. | 58. | 50. | 55. |
| 16747 P | 25. | 28. | 32. | 27. | 35. | 33. | 30. | 35. | 34. | 37. | 41. | 40. | 37. |
| 16749 P | 24. | 28. | 37. | 35. | 39. | a | 52. | 33. | 34. | 34. | 29. | 42. | 37. |
| 16750 P | 29. | 40. | 38. | 46. | 36. | 42. | 41. | 42. | 41. | 41. | 45. | 32. | 44. |
| 16753 P | 22. | 42. | 41. | 50. | 46. | 42. | 46. | 48. | 47. | 50. | 50. | 43. | 46. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D34 (PAGE 2): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | |
| 16731 P | a | 49. | 46. | 48. | 35. | 66. | 63. | 42. | 35. | | | |
| 16732 P | 62. | 62. | 64. | 64. | a | 46. | 37. | 49. | | | | |
| 16734 P | 32. | 45. | 42. | 54. | 46. | 51. | a | 43. | 41. | | | |
| 16735 P | 40. | 38. | 45. | 44. | 47. | 46. | 38. | 37. | | | | |
| 16736 P | 65. | a | 67. | a | 43. | 54. | 51. | 61. | | | | |
| 16737 P | 46. | 56. | 46. | 51. | 50. | 49. | 50. | 46. | | | | |
| 16738 P | 49. | 42. | 49. | 49. | 54. | 36. | 42. | 40. | | | | |
| 16740 P | 46. | 52. | 45. | 48. | 36. | 38. | 36. | 39. | 24. | | | |
| 16741 P | 51. | 73. | a | a | 64. | a | 51. | 58. | | | | |
| 16742 P | 43. | 45. | 43. | 52. | 40. | 39. | 45. | 34. | | | | |
| 16745 P | a | a | 64. | 66. | a | a | 31. | 49. | | | | |
| 16746 P | 53. | 54. | 65. | 56. | a | 41. | a | b | | | | |
| 16747 P | 41. | 41. | 40. | 47. | 46. | 47. | 35. | 43. | | | | |
| 16749 P | 36. | 34. | 42. | 39. | 46. | 37. | 39. | 37. | | | | |
| 16750 P | 36. | 47. | 59. | 48. | 64. | 48. | 45. | 55. | | | | |
| 16753 P | 44. | 45. | 48. | 49. | 56. | 38. | 40. | 49. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D34 (PAGE 3): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 P | 30. | 39. | 40. | 49. | 39. | 42. | 47. | 48. | 42. | 43. | 52. | 43. | 49. |
| 16758 P | 20. | 22. | 26. | 36. | 43. | 30. | 38. | 40. | 30. | 39. | 66. | 71. | 25. |
| 16760 P | 47. | 30. | 47. | 51. | 52. | 55. | 33. | 41. | 38. | 52. | 53. | a | 40. |
| 16761 P | 19. | 38. | 64. | 51. | a | 58. | 48. | 49. | 50. | a | 55. | 57. | 58. |
| 16762 P | 15. | 7. | 28. | 37. | 38. | 32. | 37. | 34. | 38. | 35. | 41. | 42. | 40. |
| 16763 P | 29. | 38. | 58. | 49. | 46. | 49. | 51. | 52. | 53. | 50. | 58. | 61. | 64. |
| 16764 P | 35. | 39. | 43. | 49. | 55. | 79. | a | a | a | a | a | a | a |
| 16765 P | 46. | 64. | a | 85. | a | b | a | a | a | a | a | a | a |
| 16767 P | 25. | 7. | 36. | 42. | 44. | 50. | 41. | 44. | 46. | 44. | 54. | 54. | 61. |
| 16768 P | 22. | 25. | 44. | 54. | 44. | 45. | 48. | 42. | 49. | 47. | 56. | 56. | 49. |
| 16769 P | 32. | 42. | 38. | 57. | 38. | 36. | 41. | 40. | 44. | 44. | 46. | 48. | 54. |
| 16770 P | 31. | 40. | 53. | 49. | 60. | 44. | 47. | 43. | 54. | 55. | 54. | 59. | 49. |
| 16771 P | 37. | 37. | 41. | 37. | 34. | 28. | 36. | 36. | 40. | 37. | 44. | 37. | 41. |
| 16773 P | 36. | 53. | 59. | 53. | 46. | 44. | 60. | 60. | 55. | 43. | 45. | 36. | 53. |
| 16774 P | 36. | 47. | 41. | 53. | a | a | a | a | 77. | a | a | a | 55. |
| 16776 P | 35. | 43. | 46. | 61. | 55. | 44. | 46. | 46. | 38. | 47. | 62. | 59. | 55. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D34 (PAGE 4): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | |
| 16755 P | 48. | 48. | 50. | 55. | 56. | 42. | 42. | 45. | | | | |
| 16758 P | 29. | 50. | 37. | 44. | 45. | 45. | 31. | 41. | | | | |
| 16760 P | 43. | 50. | 49. | 50. | 50. | 55. | 47. | 41. | 35. | | | |
| 16761 P | 49. | 56. | 53. | 57. | 72. | 64. | 58. | 44. | | | | |
| 16762 P | 45. | 42. | 44. | 47. | 51. | 50. | 52. | 32. | | | | |
| 16763 P | 59. | 59. | 62. | 59. | 65. | 47. | 60. | 54. | | | | |
| 16764 P | a | a | a | a | 68. | 65. | 55. | 63. | | | | |
| 16765 P | a | a | a | 50. | a | 42. | 69. | 50. | | | | |
| 16767 P | 46. | 49. | 49. | 35. | 42. | 41. | 46. | 30. | | | | |
| 16768 P | 52. | 53. | 55. | 66. | a | 45. | 62. | 46. | | | | |
| 16769 P | 48. | 51. | 48. | 56. | 50. | 36. | 60. | 43. | | | | |
| 16770 P | 50. | 57. | 53. | 61. | 57. | 64. | 36. | 54. | | | | |
| 16771 P | 42. | 38. | 48. | 54. | 55. | 51. | 43. | 47. | | | | |
| 16773 P | 51. | a | a | b | a | 44. | 57. | 55. | | | | |
| 16774 P | a | 73. | 51. | 48. | a | 40. | 42. | 43. | | | | |
| 16776 P | 63. | 53. | a | 71. | 68. | 50. | 57. | 48. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D34 (PAGE 5): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 P | 43. | 43. | 58. | 43. | 45. | 47. | 37. | 51. | 50. | 57. | 35. | 44. | 45. |
| 16782 P | 37. | 50. | 47. | 46. | 48. | 57. | 40. | 36. | 59. | 43. | 44. | 42. | 55. |
| 16783 P | 26. | 36. | 49. | 42. | 36. | 44. | 42. | 40. | 41. | 42. | 35. | 42. | 41. |
| 16784 P | 31. | 52. | 67. | 63. | a | 73. | 69. | 58. | 69. | 65. | 71. | 52. | a |
| 16786 P | 28. | 43. | 73. | 53. | a | 55. | 42. | 38. | 45. | 44. | 46. | 41. | 55. |
| 16787 P | 30. | a | 42. | 45. | 42. | 37. | 32. | 45. | 39. | 39. | 41. | 43. | 49. |
| 16791 P | 24. | 34. | 38. | 39. | 39. | 43. | 40. | 34. | 44. | 43. | 49. | 42. | 39. |
| 16792 P | 30. | 49. | 38. | 45. | 54. | 70. | 48. | 52. | 60. | 46. | 55. | 54. | a |
| 16793 P | 27. | 31. | 34. | 41. | 36. | 30. | 29. | 38. | 39. | 36. | 45. | 41. | 40. |
| 16794 P | 32. | 34. | 39. | 40. | 40. | 36. | 38. | 41. | 46. | 40. | 51. | 42. | 40. |
| 16795 P | 36. | 34. | 51. | 42. | 38. | 47. | 39. | 50. | 46. | 53. | 52. | 65. | a |
| 16796 P | 32. | 32. | 38. | 34. | 43. | 48. | 31. | 32. | 38. | 41. | 46. | 46. | 20. |
| 16797 P | 47. | a | a | 51. | 87. | a | a | 60. | a | a | a | a | a |
| 16798 P | 27. | 33. | 34. | 42. | 38. | 23. | 35. | 38. | 34. | 45. | 43. | 42. | 42. |
| 16799 P | 56. | 45. | 42. | 45. | 55. | 49. | 46. | 51. | 44. | 42. | 60. | 50. | 60. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D34 (PAGE 6): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | |
| 16781 P | 43. | 48. | 49. | 54. | 41. | 49. | 57. | 43. | | | | |
| 16782 P | 46. | 48. | 65. | 39. | 58. | 45. | 62. | 39. | | | | |
| 16783 P | 45. | a | 53. | 55. | 42. | 44. | 43. | 40. | | | | |
| 16784 P | 61. | 55. | 60. | 50. | 64. | 76. | a | 37. | a | | | |
| 16786 P | 46. | 52. | 53. | 60. | 62. | 53. | a | 41. | | | | |
| 16787 P | 49. | 43. | a | 52. | 66. | 47. | 51. | 45. | | | | |
| 16791 P | 45. | 40. | 50. | 52. | 53. | 57. | 35. | 34. | | | | |
| 16792 P | 49. | 60. | 66. | a | a | 67. | a | 48. | | | | |
| 16793 P | 44. | 40. | 49. | 42. | 43. | 35. | 37. | 39. | | | | |
| 16794 P | 47. | 48. | 49. | 56. | 54. | 32. | 50. | 44. | | | | |
| 16795 P | a | a | 45. | a | 65. | 49. | 44. | 42. | | | | |
| 16796 P | 2. | 37. | 41. | 43. | 27. | 37. | 32. | 36. | | | | |
| 16797 P | a | a | a | 43. | a | 49. | 48. | 47. | | | | |
| 16798 P | 36. | 40. | 44. | 42. | 50. | 35. | 42. | 43. | 31. | | | |
| 16799 P | 42. | 47. | 48. | 49. | 46. | 42. | 44. | 45. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D34 (PAGE 7): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 P | 34. | 35. | 38. | 35. | 31. | 31. | 37. | 28. | 44. | 38. | 38. | 33. | 26. |
| 16801 P | 45. | 39. | 50. | 49. | 46. | 45. | 42. | 49. | 45. | 52. | 52. | 54. | 46. |
| 16802 P | 28. | 39. | 38. | 39. | 27. | 35. | 46. | 39. | 39. | 41. | 46. | 40. | 41. |
| 16803 P | 35. | 38. | 51. | 35. | 50. | a | 55. | 64. | 58. | 53. | 52. | a | a |
| 16805 P | 39. | 45. | 44. | 51. | 48. | 52. | 56. | 49. | 48. | 56. | 49. | 61. | 58. |
| 16806 P | 32. | 41. | 38. | 42. | 47. | 50. | 42. | 49. | 45. | 50. | 54. | 56. | 59. |
| 16807 P | 35. | 47. | 43. | 50. | 50. | 47. | 48. | 45. | 42. | 43. | 46. | 51. | 45. |
| 16808 P | 33. | 42. | 53. | 65. | 44. | 47. | 45. | 45. | 49. | 44. | 61. | 52. | 58. |
| 16810 P | 35. | 41. | 45. | 49. | 38. | 46. | 45. | 40. | 40. | 48. | 42. | 40. | 41. |
| 16811 P | 33. | 32. | 38. | 39. | 45. | 42. | 37. | 39. | 37. | 46. | 52. | 44. | 42. |
| 16814 P | 22. | 31. | 34. | 25. | 29. | 30. | 32. | 46. | 37. | 31. | 44. | 37. | 25. |
| 16815 P | 39. | 48. | 40. | 66. | a | 48. | a | a | 87. | 55. | a | a | a |
| 16817 P | 27. | a | 34. | 34. | 41. | 34. | 45. | 41. | 37. | a | 57. | 54. | 36. |
| 16818 P | 26. | 40. | 39. | 45. | 34. | 32. | 33. | 37. | 39. | 41. | 43. | 38. | 38. |
| 16820 P | 23. | 19. | 29. | 10. | 26. | 27. | 41. | 41. | 42. | 45. | 33. | 50. | 38. |
| 16822 P | 27. | 36. | 38. | 39. | 37. | 41. | 38. | 37. | 41. | 35. | 37. | 36. | 39. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D34 (PAGE 8): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | |
| 16800 P | 39. | 49. | 52. | 58. | 44. | 45. | 40. | 38. | | | | |
| 16801 P | 58. | 49. | 60. | 58. | 55. | 57. | 54. | 61. | | | | |
| 16802 P | 44. | 43. | 54. | 53. | 51. | 39. | 47. | 47. | | | | |
| 16803 P | a | a | a | a | 39. | 48. | 48. | 39. | | | | |
| 16805 P | 57. | a | 55. | a | 48. | 56. | 50. | 52. | | | | |
| 16806 P | 43. | 48. | 53. | 53. | 51. | 46. | 47. | 35. | | | | |
| 16807 P | 50. | 53. | 55. | 56. | 54. | 59. | 46. | 43. | | | | |
| 16808 P | 53. | 57. | 61. | 54. | 57. | 43. | 44. | 53. | | | | |
| 16810 P | 41. | a | 44. | 51. | 39. | 47. | 51. | 46. | 46. | | | |
| 16811 P | 46. | 44. | 35. | 33. | 38. | 43. | 38. | 48. | | | | |
| 16814 P | 30. | 43. | 37. | 67. | 28. | 33. | 33. | 38. | | | | |
| 16815 P | b | 71. | a | a | a | a | a | 52. | | | | |
| 16817 P | 41. | 45. | 41. | 49. | 42. | 46. | 45. | 49. | | | | |
| 16818 P | 38. | 42. | 44. | 42. | 42. | 39. | 43. | 48. | | | | |
| 16820 P | 43. | 42. | 46. | 58. | 38. | 47. | 45. | 46. | 39. | | | |
| 16822 P | 45. | 44. | 48. | 44. | 54. | 36. | 45. | 43. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D34 (PAGE 9): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 P | 32. | 47. | a | a | a | 25. | 48. | 47. | 47. | 39. | 50. | 52. | 47. |
| 16825 P | 33. | 45. | 40. | 38. | 35. | 37. | 38. | 41. | 40. | 41. | 43. | 41. | 43. |
| 16826 P | 37. | 41. | 47. | 43. | 47. | 46. | 42. | 46. | 50. | 49. | 46. | 46. | 54. |
| 16827 P | 24. | 36. | 36. | 42. | 34. | 36. | 33. | 41. | 37. | 37. | 36. | 33. | 39. |
| 16828 P | 42. | 44. | 43. | 44. | 35. | 44. | 46. | 38. | 45. | 45. | 42. | 46. | 44. |
| 16830 P | 30. | 50. | 12. | 51. | 53. | a | a | 41. | 58. | 50. | 52. | 56. | 53. |
| 16831 P | 32. | 36. | 44. | 36. | 35. | 44. | 41. | 52. | 38. | 77. | a | a | a |
| 16833 P | 35. | 41. | 48. | 56. | 64. | 43. | 45. | 46. | 45. | 45. | 53. | 51. | 53. |
| 16834 P | 29. | 34. | 36. | 36. | 29. | 32. | 32. | 37. | 32. | 32. | 40. | 35. | 34. |
| 16836 P | 38. | a | a | a | a | a | a | 42. | 37. | a | a | a | a |
| 16837 P | 9. | 28. | 31. | 43. | 39. | 37. | 37. | 40. | 42. | 45. | 44. | 8. | 42. |
| 16839 P | 30. | 37. | 33. | 37. | 36. | 34. | 31. | 34. | 41. | 50. | 49. | 46. | 47. |
| 16840 P | 33. | 36. | 41. | 46. | 29. | 30. | 37. | 38. | 37. | 42. | 45. | 40. | 43. |
| 16842 P | 34. | 45. | 42. | 48. | 41. | 45. | 42. | 42. | 43. | 46. | 48. | 19. | 50. |
| 16843 P | 39. | 43. | 48. | 40. | 50. | 48. | 41. | 45. | 45. | 50. | 49. | 49. | 51. |
| 16844 P | 37. | 51. | 48. | 29. | 54. | 53. | 46. | 47. | 50. | 48. | 56. | 44. | 52. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D34 (PAGE 10): MATERNAL WATER CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | |
| 16823 P | 55. | a | 63. | a | 69. | 55. | 75. | 76. | | | | |
| 16825 P | 41. | 47. | 53. | 47. | 39. | 42. | 43. | 36. | | | | |
| 16826 P | 49. | 50. | 48. | 60. | 35. | 47. | a | 41. | | | | |
| 16827 P | 36. | 37. | 40. | 39. | 41. | 34. | 37. | 38. | 32. | | | |
| 16828 P | 43. | 41. | 51. | 50. | 58. | 44. | 47. | 36. | | | | |
| 16830 P | 40. | 46. | 61. | 56. | 56. | 57. | 55. | 29. | | | | |
| 16831 P | a | 79. | 53. | 53. | 47. | 45. | 64. | 51. | | | | |
| 16833 P | 47. | 55. | 60. | 54. | 57. | 51. | 59. | 52. | | | | |
| 16834 P | 36. | 49. | 49. | 48. | 48. | 38. | 41. | 48. | | | | |
| 16836 P | a | a | a | a | b | 36. | 43. | 46. | | | | |
| 16837 P | 38. | 42. | 43. | 46. | 48. | 40. | 46. | 46. | | | | |
| 16839 P | 41. | 42. | 49. | 47. | 53. | 49. | 49. | 54. | | | | |
| 16840 P | 42. | 41. | 49. | 50. | 57. | 42. | 44. | 44. | 31. | | | |
| 16842 P | 45. | 53. | 59. | 56. | 57. | 41. | 47. | 41. | | | | |
| 16843 P | 50. | 55. | 49. | 59. | 41. | 48. | 46. | 49. | | | | |
| 16844 P | 50. | 47. | 55. | 47. | 65. | 78. | 38. | 48. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D35 (PAGE 1): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 | 13. | 33. | 33. | 45. | 48. | 53. | 44. | 49. | 59. | 60. | 61. | 59. | 74. |
| 16732 | 37. | 36. | 49. | 49. | 47. | 50. | 55. | 57. | 54. | 70. | 67. | 67. | 75. |
| 16734 | 39. | 44. | a | 56. | 58. | 56. | 59. | 63. | 67. | 71. | 85. | 76. | 75. |
| 16735 | a | a | 51. | 69. | 8. | 97. | 62. | 65. | 77. | 83. | 85. | 83. | 86. |
| 16736 | 47. | 47. | 55. | 77. | 62. | 67. | 49. | 61. | 68. | 77. | 86. | 95. | 82. |
| 16737 | 31. | 53. | 65. | 81. | 76. | 90. | 69. | 84. | 89. | 78. | 107. | 102. | 90. |
| 16738 | 37. | 52. | 51. | 71. | 60. | 65. | 66. | 81. | 72. | 88. | 87. | 94. | 83. |
| 16740 | 18. | 31. | 43. | 55. | 55. | 59. | 61. | 55. | 83. | 97. | 76. | 82. | 78. |
| 16741 | 34. | 37. | 50. | 62. | 67. | 71. | 71. | 61. | 64. | 74. | 87. | 89. | 79. |
| 16742 | 20. | 43. | 45. | 56. | 47. | 52. | 66. | 52. | 64. | 72. | 69. | 69. | 76. |
| 16745 | 58. | 60. | 78. | 94. | 73. | 61. | 63. | 49. | 61. | 65. | 68. | 77. | 78. |
| 16746 | 34. | 52. | 56. | 70. | 71. | 54. | 70. | 62. | 62. | 52. | 73. | 77. | 85. |
| 16747 | 48. | 50. | 52. | 62. | 54. | 53. | 65. | 61. | 60. | 74. | 77. | 82. | 69. |
| 16749 | 51. | 50. | 50. | 54. | 43. | 43. | 46. | 55. | 76. | 92. | 77. | 96. | 103. |
| 16750 | 38. | 51. | 65. | 81. | 72. | 68. | 70. | 89. | 75. | 88. | 91. | 98. | 82. |
| 16753 | 13. | 29. | 40. | 40. | 48. | 47. | 46. | 55. | 51. | 66. | 63. | 65. | 70. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D35 (PAGE 2): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 | 32. | 35. | 35. | 55. | 50. | 47. | 59. | 63. | 61. | 79. | 81. | 78. | 92. |
| 16758 | 36. | 59. | a | 110. | 60. | 60. | 49. | 49. | 58. | 70. | 70. | 75. | a |
| 16760 | 59. | 61. | 78. | 91. | 70. | 63. | 68. | 73. | 75. | 95. | 92. | 91. | 105. |
| 16761 | 22. | 52. | 54. | 59. | 72. | 71. | 71. | 70. | 76. | 88. | 101. | 82. | 110. |
| 16762 | 38. | 44. | 56. | 63. | 56. | 60. | 71. | 78. | 73. | 81. | 79. | a | 92. |
| 16763 | 37. | 59. | 69. | 82. | 90. | 77. | 85. | 86. | 90. | 86. | 96. | 79. | 105. |
| 16764 | 84. | a | a | a | 76. | 88. | 84. | 89. | 90. | 97. | 94. | 111. | 113. |
| 16765 | 78. | 58. | 109. | a | 70. | 98. | 73. | 69. | 71. | 69. | 83. | 80. | 95. |
| 16767 | 37. | 48. | 63. | 63. | 67. | 64. | 80. | 77. | 74. | 95. | 72. | 105. | 99. |
| 16768 | 46. | 37. | 56. | 75. | 68. | 71. | 64. | 71. | 98. | 92. | 116. | 94. | 103. |
| 16769 | 42. | 42. | 49. | 57. | 71. | 65. | 54. | 70. | 58. | 73. | 85. | 83. | 102. |
| 16770 | 46. | 58. | 62. | 75. | 73. | 68. | 65. | 71. | 81. | 93. | 93. | 110. | 106. |
| 16771 | 32. | 53. | 52. | 57. | 57. | 57. | 58. | 67. | 70. | 78. | 79. | 81. | 92. |
| 16773 | 36. | 51. | 57. | 73. | 76. | 71. | 84. | 84. | 96. | a | 93. | 94. | 87. |
| 16774 | 37. | 37. | 47. | 95. | 51. | 68. | 62. | 68. | 66. | b | 63. | 94. | 89. |
| 16776 | 40. | 50. | 73. | 84. | 66. | 65. | 76. | 73. | 79. | 90. | 53. | 97. | 89. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.
b. Value was not recorded.

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TABLE D35 (PAGE 3): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 | 34. | 51. | 37. | 73. | 76. | 66. | 72. | 65. | 76. | 87. | 94. | 93. | 89. |
| 16782 | 55. | 58. | 81. | 83. | 81. | 47. | 64. | 71. | 75. | 87. | 75. | 82. | 82. |
| 16783 | 16. | 41. | 52. | 56. | 59. | 51. | 62. | 65. | a | 71. | 80. | 73. | 87. |
| 16784 | 47. | 45. | 54. | 58. | 74. | 72. | 53. | 84. | 70. | 80. | 77. | 80. | 88. |
| 16786 | 43. | 57. | 71. | 69. | 60. | 54. | 75. | 87. | 77. | 93. | 95. | b | 107. |
| 16787 | 33. | 50. | 50. | 69. | 62. | 57. | 72. | 66. | 76. | 75. | 81. | 71. | 72. |
| 16791 | 33. | 37. | 52. | 58. | 62. | 57. | 73. | 67. | 69. | 84. | 71. | a | 81. |
| 16792 | 43. | 48. | 42. | 49. | 64. | 36. | 51. | 53. | 66. | 70. | 62. | 67. | 75. |
| 16793 | 36. | 42. | 42. | 38. | 60. | 50. | 61. | 65. | 60. | 81. | 72. | 81. | 78. |
| 16794 | 43. | 48. | 65. | 73. | 50. | 57. | 59. | 68. | 60. | 82. | 77. | 88. | 70. |
| 16795 | 42. | 57. | 72. | 85. | 67. | 72. | 79. | 73. | 80. | 84. | 85. | 97. | 87. |
| 16796 | 20. | 35. | 47. | 44. | 69. | 58. | 66. | 66. | 66. | 72. | 70. | 71. | 80. |
| 16797 | b | 56. | 68. | 77. | b | b | 99. | 103. | 86. | b | 120. | 124. | b |
| 16798 | 36. | 49. | 62. | 81. | 63. | 52. | 62. | 63. | 80. | 79. | 70. | 80. | 77. |
| 16799 | 46. | 65. | 63. | 94. | 66. | 82. | 90. | 87. | 104. | 93. | 86. | 91. | 91. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.
b. Value not tabulated due to spillage or presumed spillage.

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TABLE D35 (PAGE 4): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 | 44. | 40. | 49. | 59. | 52. | 50. | 59. | 59. | 69. | 71. | 73. | 68. | 93. |
| 16801 | 36. | 64. | 80. | 72. | 74. | 49. | 63. | 81. | 73. | 87. | 92. | 67. | 86. |
| 16802 | 45. | 53. | 60. | 64. | 47. | 45. | 50. | 66. | 61. | 89. | 93. | 84. | 73. |
| 16803 | 51. | 52. | 58. | 69. | 62. | 59. | 58. | 60. | 84. | 80. | 83. | 81. | 78. |
| 16805 | 46. | 55. | 54. | 65. | 63. | 57. | 73. | 64. | 86. | 89. | 94. | 90. | 97. |
| 16806 | 35. | 55. | 63. | 69. | 65. | 69. | 76. | 73. | 73. | 80. | 66. | 79. | 103. |
| 16807 | 47. | 49. | 61. | 54. | 64. | 62. | 49. | 57. | 57. | 64. | 70. | 86. | 86. |
| 16808 | 38. | 58. | 63. | 65. | 74. | 76. | 79. | 91. | 86. | 82. | 110. | 116. | 106. |
| 16810 | 23. | 54. | 56. | 70. | 61. | 47. | 80. | 67. | 83. | 93. | 80. | 100. | 95. |
| 16811 | 26. | 40. | 47. | 44. | 45. | 54. | 63. | 49. | 68. | 64. | 80. | 81. | 87. |
| 16814 | 36. | 52. | 63. | 48. | 62. | 58. | 59. | 65. | 66. | 70. | 62. | 71. | 60. |
| 16815 | 71. | 74. | 74. | 88. | 89. | 71. | 86. | 75. | 75. | 84. | 85. | a | 122. |
| 16817 | 44. | 50. | 60. | 74. | a | 64. | 65. | 62. | 76. | 64. | 81. | 53. | 102. |
| 16818 | a | 53. | 65. | 74. | 67. | 62. | 65. | 65. | 74. | 77. | 84. | 81. | 83. |
| 16820 | 24. | 46. | 53. | 52. | 54. | 59. | 67. | 63. | 76. | 73. | 78. | 76. | 86. |
| 16822 | 32. | 36. | 58. | 60. | 53. | 59. | 50. | 76. | 64. | 72. | 66. | 71. | 73. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value not tabulated due to spillage or presumed spillage.

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TABLE D35 (PAGE 5): MATERNAL WATER CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 | 21. | 48. | 79. | 62. | 56. | 63. | 65. | 67. | 79. | 67. | 78. | 86. | 91. |
| 16825 | 50. | 62. | 56. | 67. | 63. | 60. | 65. | 67. | 85. | 77. | 79. | 79. | 84. |
| 16826 | 41. | 58. | 60. | 73. | 63. | 65. | 79. | 65. | 89. | 102. | 111. | 99. | a |
| 16827 | 46. | 65. | 51. | 63. | 56. | 60. | 59. | 59. | a | 69. | 65. | 71. | 82. |
| 16828 | 38. | 57. | 68. | 64. | 71. | 62. | 55. | 73. | 74. | 104. | 85. | 81. | 98. |
| 16830 | 27. | 53. | 64. | 62. | 67. | 61. | 71. | 76. | 70. | 80. | 64. | 87. | 79. |
| 16831 | 36. | 58. | 96. | 77. | 67. | 76. | 87. | 98. | 90. | 83. | 119. | 90. | 95. |
| 16833 | 41. | 44. | 52. | 51. | 52. | 57. | 62. | 68. | 65. | 72. | 71. | 69. | 66. |
| 16834 | 26. | 48. | 56. | 65. | 59. | 58. | 52. | 62. | 54. | 75. | 80. | 78. | 74. |
| 16836 | 47. | 41. | 65. | 64. | 62. | 55. | 79. | 67. | 76. | 76. | 82. | 81. | 85. |
| 16837 | 38. | 48. | 56. | 59. | 62. | 55. | 52. | 61. | 63. | 78. | 69. | 86. | 87. |
| 16839 | 36. | 53. | 69. | 72. | 49. | 63. | 56. | 74. | 64. | 76. | 83. | 77. | 84. |
| 16840 | 44. | 56. | 72. | 70. | 79. | 59. | 80. | 68. | 94. | 91. | 90. | 81. | 89. |
| 16842 | 53. | 59. | 94. | 81. | 77. | 82. | 73. | 85. | 78. | 100. | 83. | 94. | 86. |
| 16843 | 51. | 60. | 68. | 65. | 64. | 55. | 68. | 61. | 73. | 59. | 85. | 77. | 79. |
| 16844 | 35. | 41. | 63. | 63. | 61. | 65. | 64. | 81. | 77. | a | 88. | 94. | 90. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.

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TABLE D36 (PAGE 1): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 | 12. | 21. | 17. | 20. | 16. | 17. | 19. | 17. | 15. | 17. | 20. | 16. | 10. |
| 16732 | 21. | 27. | 23. | 22. | 26. | 27. | 24. | 19. | 25. | 27. | 26. | 20. | 24. |
| 16733 | 21. | 23. | 19. | 15. | 21. | 23. | 21. | 19. | 15. | 21. | 22. | 23. | 16. |
| 16734 | 19. | 20. | 16. | 20. | 20. | 15. | 17. | 19. | 19. | 21. | 18. | 17. | 19. |
| 16735 | 17. | 15. | 12. | 18. | 17. | 16. | 9. | 20. | 17. | 19. | 14. | 18. | 19. |
| 16736 | 26. | b | 25. | 20. | 18. | 18. | 22. | 20. | 19. | b | 23. | 21. | 17. |
| 16737 | 20. | 18. | 18. | 19. | 19. | 19. | 16. | 20. | 18. | 19. | 16. | 19. | 18. |
| 16738 | 20. | 18. | 19. | 16. | 17. | 20. | 20. | 14. | 17. | 21. | 20. | 17. | 16. |
| 16739 | 18. | 20. | b | 23. | 18. | 20. | 18. | 20. | 22. | 22. | 25. | 32. | 21. |
| 16740 | 21. | 22. | 21. | 19. | 17. | 16. | 21. | 18. | 12. | 20. | 20. | 20. | 12. |
| 16741 | 19. | 19. | 19. | 16. | 19. | 19. | 18. | 15. | 18. | 22. | 19. | 16. | 20. |
| 16742 | 31. | 23. | 19. | 22. | 14. | 17. | 18. | 20. | 13. | 18. | 21. | 19. | 11. |
| 16743 | 16. | 18. | 17. | b | 17. | 19. | 17. | 12. | 18. | 18. | 18. | 14. | 15. |
| 16744 | 18. | 21. | 18. | 19. | 17. | 18. | 18. | 16. | 18. | 20. | 19. | 16. | 18. |
| 16745 | 15. | 21. | 23. | 21. | 16. | 14. | 21. | 20. | 20. | 20. | 14. | 19. | 19. |
| 16746 | 21. | 22. | 21. | 19. | 21. | 21. | 20. | 15. | 20. | 25. | 21. | 16. | 19. |
| 16747 | 18. | 18. | 14. | 18. | 18. | 18. | 14. | 16. | 17. | 18. | 18. | 16. | 17. |
| 16748 | 31. | 24. | 22. | 20. | 14. | 17. | 20. | 18. | 15. | 21. | 22. | 19. | 17. |
| 16749 | 15. | 13. | 17. | 19. | 15. | 13. | 17. | 20. | 17. | 13. | 19. | 19. | 16. |
| 16750 | 24. | 23. | 23. | 19. | 23. | 24. | 20. | 21. | 20. | 23. | 24. | 19. | 21. |
| 16751 | 16. | 20. | 15. | 14. | 19. | 16. | 19. | 15. | 16. | 22. | 19. | 11. | 16. |
| 16752 | 17. | 16. | 21. | 19. | 15. | 20. | 21. | 17. | 17. | 23. | 22. | 20. | 16. |
| 16753 | b | 23. | 18. | 15. | 18. | 20. | 18. | 14. | 18. | 20. | 19. | 15. | 17. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.

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TABLE D36 (PAGE 2): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16754 | 16. | 19. | 14. | 16. | 26. | 17. | 18. | 13. | 12. | 17. | 19. | 16. | 11. |
| 16755 | 17. | 23. | 23. | 19. | 19. | 22. | 22. | 15. | 20. | 23. | 22. | 18. | 19. |
| 16756 | 15. | 21. | 20. | 21. | 16. | 19. | 25. | 17. | 17. | 20. | 22. | 21. | 15. |
| 16757 | 31. | 29. | b | 19. | 15. | 30. | 20. | 19. | 16. | 20. | 23. | 19. | 33. |
| 16758 | 16. | 18. | 13. | 17. | 16. | 16. | 14. | 17. | 19. | 17. | 18. | 17. | 18. |
| 16759 | 22. | 45. | b | b | 21. | 23. | 20. | 19. | 23. | 25. | 25. | 26. | 25. |
| 16760 | 20. | 18. | 21. | 21. | 9. | 25. | 15. | 20. | 17. | 20. | 18. | 20. | 18. |
| 16761 | 15. | 18. | 23. | 22. | 19. | 16. | 20. | 20. | 19. | 16. | 22. | 26. | 25. |
| 16762 | 17. | 14. | 17. | 18. | 15. | 13. | 19. | 16. | 17. | 13. | 17. | 17. | 15. |
| 16763 | 21. | 24. | 21. | 19. | 22. | 24. | 23. | 20. | 21. | 25. | 26. | 15. | 18. |
| 16764 | 20. | 16. | 18. | 14. | 17. | 18. | 15. | 12. | 17. | 17. | 17. | 15. | 16. |
| 16765 | 17. | 23. | 17. | 19. | 21. | 16. | 20. | 15. | 15. | 18. | 22. | 17. | 20. |
| 16766 | 16. | 28. | 19. | 13. | 30. | 21. | 18. | 9. | 15. | 19. | 17. | 21. | 18. |
| 16767 | 21. | 21. | 21. | 21. | 22. | 18. | 21. | 22. | 17. | 20. | 21. | 21. | 17. |
| 16768 | 24. | 26. | 23. | 19. | 22. | 24. | 23. | 18. | 26. | 28. | 25. | 21. | 23. |
| 16769 | 22. | 22. | 19. | 19. | 21. | 20. | 23. | 18. | 22. | 22. | 24. | 17. | 20. |
| 16770 | b | 22. | 14. | 23. | 24. | 14. | 18. | 22. | 19. | 21. | 20. | 21. | 14. |
| 16771 | 16. | 16. | 19. | 16. | 14. | 19. | 15. | 19. | 15. | 17. | 20. | 16. | 17. |
| 16772 | 14. | 17. | 16. | 16. | 15. | 15. | 18. | 18. | 15. | 18. | 20. | 17. | 15. |
| 16773 | 19. | 22. | 20. | 16. | 20. | 21. | 20. | 15. | 21. | 22. | 20. | 16. | 19. |
| 16774 | 18. | 20. | 18. | 15. | 19. | 19. | 19. | 15. | 20. | 24. | 20. | 17. | 19. |
| 16775 | 16. | 17. | 18. | 23. | 19. | 13. | 18. | 24. | 18. | 16. | 21. | 22. | 19. |
| 16776 | 18. | 20. | 17. | 17. | 15. | 19. | 19. | 16. | 16. | 18. | 20. | 16. | 17. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D36 (PAGE 3): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16777 | 12. | 19. | 18. | 17. | 13. | 36. | 20. | 16. | 15. | 20. | 22. | 19. | 15. |
| 16778 | 19. | 23. | 21. | 23. | 17. | 23. | 26. | 21. | 17. | 17. | 26. | 23. | 18. |
| 16779 | 14. | 20. | 19. | 18. | 17. | 19. | 17. | 19. | 17. | 18. | 19. | 19. | 17. |
| 16780 | 20. | 25. | 20. | 19. | 16. | 19. | 18. | 18. | 16. | 21. | 20. | 19. | 13. |
| 16781 | 56. | 26. | 26. | 21. | 18. | 21. | 23. | 19. | 16. | 22. | 23. | 19. | 18. |
| 16782 | 16. | 22. | 20. | 23. | 18. | 19. | 26. | 22. | 18. | 20. | 25. | 22. | 17. |
| 16783 | 11. | 20. | 20. | 17. | 13. | 19. | 19. | 17. | 14. | 17. | 20. | 18. | 14. |
| 16784 | 20. | 15. | 19. | 22. | 20. | 11. | 18. | 21. | 17. | 15. | 22. | 21. | 16. |
| 16785 | 30. | 19. | 20. | 21. | 31. | 17. | 20. | 17. | 17. | 19. | 20. | 19. | 19. |
| 16786 | 18. | 19. | 19. | 19. | 12. | 21. | 20. | 22. | 12. | 21. | 22. | 20. | 12. |
| 16787 | 20. | 20. | 21. | 24. | 23. | 22. | 19. | 15. | 19. | 23. | 20. | 18. | 21. |
| 16788 | 18. | 22. | 16. | 17. | 19. | 19. | 20. | 18. | 17. | 22. | 18. | 17. | 20. |
| 16789 | b | 23. | 17. | 19. | 16. | 20. | 19. | 18. | 17. | 19. | 23. | 18. | c |
| 16790 | 20. | 22. | 18. | 17. | 22. | 22. | 21. | 18. | 22. | 22. | 20. | 18. | 21. |
| 16791 | 19. | 18. | 16. | 16. | 16. | 15. | 14. | 20. | 17. | 19. | 17. | 17. | 17. |
| 16792 | 17. | 14. | 19. | 21. | 16. | 15. | 20. | 20. | 19. | 16. | 21. | 20. | 18. |
| 16793 | 17. | 19. | 17. | 16. | 18. | 18. | 18. | 15. | 17. | 19. | 20. | 17. | 16. |
| 16794 | 19. | 21. | 20. | 13. | 18. | 20. | 22. | 14. | 21. | 20. | 21. | 13. | 17. |
| 16795 | 16. | 21. | 27. | 21. | 16. | 24. | 22. | 17. | 17. | 21. | 27. | 20. | 16. |
| 16796 | 13. | 20. | 18. | 19. | 11. | 12. | 21. | 21. | 18. | 16. | 14. | 18. | 19. |
| 16797 | 19. | 21. | 16. | 16. | 18. | 20. | 18. | 16. | 18. | 21. | 19. | 14. | 17. |
| 16798 | 17. | 13. | 18. | 17. | 17. | 19. | 18. | 13. | 17. | 20. | 20. | 14. | 17. |
| 16799 | 13. | 22. | 18. | 21. | 18. | 14. | 19. | 16. | 20. | 20. | 16. | 21. | 19. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Value was not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D36 (PAGE 4): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 | 19. | 23. | 23. | 17. | 15. | 16. | 18. | 13. | 10. | 15. | 19. | 17. | 10. |
| 16801 | 25. | 22. | 19. | 22. | 21. | 30. | 19. | 21. | 22. | 21. | 20. | 22. | 23. |
| 16802 | 20. | 25. | 24. | 21. | 18. | 16. | 18. | 17. | 17. | 19. | 22. | 17. | 16. |
| 16803 | 15. | 22. | 22. | 21. | 14. | 22. | 21. | 20. | 13. | 22. | 25. | 20. | 15. |
| 16804 | 13. | 21. | 18. | 21. | 15. | 18. | 21. | 19. | 17. | 22. | 24. | 20. | 14. |
| 16805 | 19. | 26. | 26. | 24. | 16. | 21. | 26. | 22. | 15. | 19. | 23. | 20. | 13. |
| 16806 | 19. | 15. | 19. | 19. | 19. | 18. | 19. | 19. | 18. | 17. | 18. | 20. | 17. |
| 16807 | b | 21. | 18. | 18. | 13. | 19. | 19. | 18. | 14. | 13. | 19. | 21. | 16. |
| 16808 | 18. | 18. | 15. | 14. | 17. | 18. | 19. | 14. | 18. | 18. | 19. | 13. | 17. |
| 16809 | 20. | 28. | 18. | 18. | 20. | 19. | 22. | 15. | 21. | 23. | 23. | 21. | 21. |
| 16810 | 21. | 20. | 22. | 17. | 18. | 18. | 21. | 20. | 14. | 20. | 23. | 18. | 15. |
| 16811 | 19. | 18. | 14. | 21. | 18. | 20. | 13. | 16. | 18. | 17. | 14. | 18. | 20. |
| 16812 | 19. | 16. | 19. | 19. | 18. | 18. | 19. | 19. | 17. | 18. | 20. | 20. | 19. |
| 16813 | 18. | 23. | 17. | 15. | 20. | 19. | 19. | 14. | 19. | 22. | 23. | 16. | 17. |
| 16814 | 13. | 22. | 18. | 21. | 14. | 20. | 18. | 22. | 14. | 19. | 22. | 21. | 13. |
| 16815 | 28. | 21. | 19. | 20. | 38. | 12. | 19. | 21. | 18. | 19. | 24. | 20. | 18. |
| 16816 | 21. | 17. | 35. | 20. | 30. | 19. | 16. | 18. | 18. | 20. | 18. | 17. | 19. |
| 16817 | b | 51. | 21. | 24. | 60. | b | 21. | 21. | 21. | 22. | 22. | 26. | 24. |
| 16818 | 19. | 18. | 18. | 15. | 16. | 21. | 18. | 15. | 17. | 19. | 20. | 15. | 16. |
| 16819 | 20. | 12. | 21. | 25. | 19. | 14. | 23. | 23. | 21. | 16. | 22. | 23. | 18. |
| 16820 | 15. | 20. | 17. | 20. | 15. | 20. | 18. | 20. | 16. | 17. | 24. | 18. | 15. |
| 16821 | 11. | 26. | 18. | 26. | 8. | 18. | 30. | 22. | 16. | 21. | 23. | 22. | 11. |
| 16822 | 24. | 23. | 18. | 16. | 21. | 18. | 19. | 16. | 20. | 23. | 22. | 17. | 20. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D36 (PAGE 5): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAYS | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 -10 | 10 -11 | 11 -12 | 12 -13 | 13 -14a |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 | 17. | b | b | 17. | 18. | 17. | 11. | 17. | 18. | 17. | 15. | 17. | 17. |
| 16824 | 23. | 25. | 25. | 20. | 26. | 24. | 22. | 16. | 21. | 25. | 26. | 26. | 19. |
| 16825 | 17. | 19. | 20. | 19. | 16. | 20. | 20. | 19. | 14. | 19. | 21. | 17. | 18. |
| 16826 | 15. | 23. | 22. | 22. | 33. | 24. | 25. | 23. | 18. | 25. | 26. | 26. | 18. |
| 16827 | 16. | 18. | 15. | 14. | 0. | 47. | 15. | 12. | 16. | 18. | 18. | 14. | 16. |
| 16828 | 22. | 25. | 23. | 25. | 21. | c | 27. | 24. | 23. | 16. | 21. | 22. | 25. |
| 16829 | 21. | 23. | 25. | 20. | 20. | 22. | 20. | 18. | 23. | 20. | 26. | 19. | 20. |
| 16830 | 16. | 18. | 19. | 14. | 17. | 21. | 18. | 19. | 16. | 18. | 22. | 19. | 14. |
| 16831 | 15. | 21. | 23. | 18. | 16. | 17. | 20. | 20. | 15. | 20. | 19. | 21. | 14. |
| 16832 | 18. | 21. | 18. | 19. | 17. | 16. | 18. | 19. | 17. | 19. | 19. | 19. | 17. |
| 16833 | 23. | 24. | 19. | 16. | 23. | 21. | 20. | 25. | 11. | 25. | 22. | 15. | 18. |
| 16834 | 19. | 17. | 17. | 17. | 15. | 16. | 18. | 14. | 15. | 19. | 17. | 14. | 16. |
| 16835 | 19. | 29. | 19. | 17. | 21. | 22. | 23. | 16. | 21. | 25. | 22. | 18. | 18. |
| 16836 | 24. | 25. | 22. | 22. | 21. | 21. | 20. | 16. | 21. | 25. | 23. | 19. | 19. |
| 16837 | 17. | 21. | 16. | 15. | 17. | 17. | 15. | 16. | 16. | 20. | 23. | 14. | 17. |
| 16838 | 13. | 17. | 18. | 17. | 13. | 17. | 20. | 19. | 15. | 15. | 22. | 16. | 14. |
| 16839 | 18. | 19. | 16. | 19. | 16. | 18. | 18. | 14. | 16. | 18. | 18. | 13. | 16. |
| 16840 | 23. | 23. | 17. | 15. | 21. | 21. | 18. | 12. | 19. | 21. | 22. | 15. | 17. |
| 16841 | 20. | 19. | 15. | 19. | 6. | 19. | 15. | 18. | 18. | 17. | 15. | 19. | 16. |
| 16842 | 14. | 20. | 18. | 13. | 10. | 18. | 20. | 18. | 14. | 16. | 15. | 18. | 17. |
| 16843 | 22. | 21. | 18. | 17. | 21. | 19. | 20. | 14. | 20. | 19. | 20. | 16. | 13. |
| 16844 | 17. | 23. | 22. | 21. | 18. | 19. | 22. | 22. | 22. | 16. | 22. | 24. | 21. |
| 16845 | 13. | 19. | 18. | 17. | 14. | 18. | 22. | 18. | 16. | 17. | 21. | 16. | 18. |

DAY = DAY OF STUDY
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Last value recorded before cohabitation.
b. Spilled feed precluded the calculation of this value.
c. Value was incorrectly recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D37 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 P | 18. | 19. | 21. | 23. | 22. | 23. | 24. | 22. | 24. | 27. | 21. | 27. | 24. |
| 16732 P | 23. | 33. | 34. | 35. | 37. | 36. | 32. | 38. | 35. | 37. | 39. | 36. | 34. |
| 16734 P | 21. | 21. | 22. | 21. | 24. | 23. | 24. | 27. | 26. | 25. | 24. | 27. | 21. |
| 16735 P | 23. | 26. | 25. | 24. | 25. | 26. | 20. | 26. | 26. | 26. | 29. | 28. | 25. |
| 16736 P | 24. | 22. | 24. | 26. | 23. | 24. | 26. | a | 27. | 25. | 27. | 26. | 27. |
| 16737 P | 22. | 21. | 23. | 20. | 23. | 23. | 19. | 25. | 24. | 24. | 26. | 26. | 24. |
| 16738 P | 20. | 22. | 23. | 25. | 22. | 20. | 26. | 22. | 26. | 24. | 26. | 25. | 26. |
| 16740 P | 25. | 24. | 23. | 21. | 19. | 22. | 21. | 24. | 25. | 26. | 22. | 22. | 24. |
| 16741 P | 22. | 21. | 17. | 23. | 24. | 23. | 23. | 28. | 23. | 23. | 27. | 24. | 23. |
| 16742 P | 22. | 20. | 25. | 24. | 20. | 25. | 26. | 23. | 26. | 25. | 27. | 26. | 25. |
| 16745 P | 23. | 26. | 23. | 20. | 24. | 26. | 22. | 27. | 25. | 29. | 30. | 28. | 27. |
| 16746 P | 25. | 23. | 20. | 22. | 19. | 21. | 24. | 19. | 23. | 17. | 24. | 22. | 22. |
| 16747 P | 18. | 20. | 23. | 17. | 25. | 23. | 20. | 22. | 23. | 24. | 25. | 24. | 24. |
| 16749 P | 21. | 21. | 22. | 19. | 20. | 22. | 20. | 19. | 21. | 21. | 17. | 23. | 20. |
| 16750 P | 28. | 27. | 22. | 28. | 23. | 28. | 29. | 26. | 26. | 26. | 33. | 25. | 27. |
| 16753 P | 18. | 22. | 23. | 25. | 25. | 20. | 25. | 27. | 23. | 24. | 26. | 21. | 26. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D37 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | |
| 16731 P | 21. | 21. | 22. | 21. | 18. | 21. | 18. | 21. | 15. | | | |
| 16732 P | 34. | 31. | 33. | 34. | 30. | 25. | 20. | 25. | | | | |
| 16734 P | 22. | 23. | 25. | 27. | 28. | 29. | 27. | 23. | 25. | | | |
| 16735 P | 26. | 24. | 27. | 28. | 27. | 26. | 19. | 19. | | | | |
| 16736 P | 27. | 25. | 27. | 30. | 21. | 27. | 25. | 24. | | | | |
| 16737 P | 25. | 26. | 25. | 27. | 29. | 25. | 20. | 21. | | | | |
| 16738 P | 24. | 23. | 27. | 26. | 26. | 21. | 26. | 25. | | | | |
| 16740 P | 19. | 23. | 19. | 24. | 12. | 19. | 22. | 27. | 12. | | | |
| 16741 P | 23. | 31. | 27. | 28. | 29. | 26. | 29. | 24. | | | | |
| 16742 P | 24. | 25. | 25. | 28. | 20. | 23. | 22. | 21. | | | | |
| 16745 P | 26. | 27. | 29. | 29. | 29. | 27. | 13. | 16. | | | | |
| 16746 P | 21. | 24. | 28. | 22. | 25. | 23. | 17. | a | | | | |
| 16747 P | 27. | 25. | 24. | 30. | 29. | 28. | 19. | 24. | | | | |
| 16749 P | 22. | 20. | 21. | 28. | 28. | 25. | 26. | 17. | | | | |
| 16750 P | 23. | 29. | 27. | 30. | 27. | 34. | 27. | 24. | | | | |
| 16753 P | 22. | 28. | 21. | 27. | 24. | 20. | 18. | 19. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Value was not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D37 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 P | 20. | 21. | 29. | 28. | 27. | 27. | 31. | 26. | 27. | 24. | 30. | 26. | 26. |
| 16758 P | 17. | 19. | 19. | 19. | 20. | 20. | 20. | 20. | 19. | 22. | 23. | 23. | 19. |
| 16760 P | 20. | 21. | 19. | 19. | 21. | 23. | 19. | 22. | 23. | 23. | 21. | 24. | 21. |
| 16761 P | 19. | 24. | 25. | 23. | 25. | 23. | 23. | 20. | 25. | 25. | 24. | 25. | 23. |
| 16762 P | 20. | 20. | 23. | 22. | 23. | 23. | 23. | 21. | 24. | 23. | 25. | 23. | 23. |
| 16763 P | 25. | 26. | 27. | 28. | 29. | 25. | 30. | 30. | 29. | 31. | 32. | 30. | 32. |
| 16764 P | 22. | 22. | 22. | 23. | 23. | 19. | 22. | 24. | 19. | 19. | 21. | 21. | 14. |
| 16765 P | 23. | 24. | 18. | 29. | 22. | 23. | 25. | 25. | 20. | 14. | 31. | 21. | 24. |
| 16767 P | 21. | 26. | 25. | 24. | 26. | 24. | 27. | 24. | 29. | 26. | 26. | 27. | 31. |
| 16768 P | 27. | 27. | 29. | 30. | 29. | 24. | 31. | 30. | 32. | 30. | 28. | 33. | 28. |
| 16769 P | 21. | 25. | 19. | 27. | 25. | 20. | 27. | 25. | 26. | 23. | 29. | 23. | 29. |
| 16770 P | 18. | 23. | 26. | 21. | 32. | 27. | 27. | 29. | 29. | 28. | 33. | 33. | 29. |
| 16771 P | 20. | 21. | 21. | 24. | 24. | 18. | 23. | 22. | 24. | 19. | 24. | 19. | 23. |
| 16773 P | 23. | 25. | 21. | 26. | 22. | 22. | 27. | 25. | 21. | 26. | 25. | 26. | 24. |
| 16774 P | 21. | 22. | 19. | 25. | 26. | 25. | 24. | 24. | 22. | 25. | 25. | 23. | 24. |
| 16776 P | 19. | 20. | 21. | 22. | 25. | 21. | 26. | 23. | 24. | 24. | 27. | 23. | 24. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D37 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS | DAYS 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | |
| 16755 P | 25. | 28. | 29. | 27. | 33. | 22. | 26. | 30. | | | | |
| 16758 P | 23. | 24. | 20. | 25. | 23. | 25. | 16. | 19. | | | | |
| 16760 P | 21. | 19. | 23. | 23. | 21. | 23. | 21. | 21. | 15. | | | |
| 16761 P | 21. | 22. | 22. | 27. | 28. | 25. | 25. | 16. | | | | |
| 16762 P | 25. | 23. | 24. | 27. | 26. | 27. | 26. | 18. | | | | |
| 16763 P | 26. | 28. | 31. | 32. | 31. | 25. | 26. | 25. | | | | |
| 16764 P | 13. | 18. | 22. | 20. | 31. | 25. | 23. | 26. | | | | |
| 16765 P | 24. | 24. | 30. | 28. | 28. | 23. | 25. | 20. | | | | |
| 16767 P | 25. | 25. | 24. | 19. | 19. | 20. | 28. | 14. | | | | |
| 16768 P | 28. | 28. | 29. | 29. | 20. | 23. | 31. | 23. | | | | |
| 16769 P | 22. | 26. | 27. | 25. | 26. | 21. | 24. | 19. | | | | |
| 16770 P | 27. | 29. | 27. | 32. | 32. | 31. | 22. | 29. | | | | |
| 16771 P | 18. | 22. | 23. | 20. | 23. | 22. | 20. | 23. | | | | |
| 16773 P | 23. | 25. | 26. | 27. | 30. | 26. | 25. | 25. | | | | |
| 16774 P | 20. | 22. | 24. | 21. | 22. | 18. | 21. | 20. | | | | |
| 16776 P | 21. | 23. | 22. | 25. | 19. | 20. | 23. | 21. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D37 (PAGE 5): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 P | 23. | 20. | 24. | 22. | 22. | 23. | 19. | 22. | 23. | 22. | 18. | 21. | 21. |
| 16782 P | 24. | 27. | 26. | 28. | 27. | 29. | 29. | 24. | 34. | 30. | 30. | 29. | 32. |
| 16783 P | 19. | 20. | 24. | 24. | 21. | 25. | 27. | 34. | 27. | 27. | 25. | 26. | 24. |
| 16784 P | 19. | 23. | 24. | 27. | 25. | 26. | 30. | 22. | 35. | 30. | 28. | 18. | 29. |
| 16786 P | 20. | 23. | 25. | 25. | 25. | 26. | 29. | 20. | 28. | 26. | 26. | 26. | 27. |
| 16787 P | 22. | 22. | 24. | 25. | 28. | 23. | 22. | 27. | 24. | 24. | 29. | 26. | 30. |
| 16791 P | 20. | 21. | 22. | 19. | 23. | 27. | 21. | 26. | 25. | 24. | 24. | 27. | 19. |
| 16792 P | 19. | 28. | 23. | 24. | 24. | 26. | 27. | 24. | 24. | 24. | 27. | 25. | 29. |
| 16793 P | 21. | 22. | a | a | 26. | 18. | 25. | 24. | 25. | 24. | 26. | 21. | 24. |
| 16794 P | 22. | 20. | 23. | 24. | 25. | 19. | 23. | 26. | 26. | 22. | 27. | 25. | 25. |
| 16795 P | 26. | 22. | 26. | 26. | 21. | 25. | 24. | 30. | 27. | 29. | 23. | 28. | 22. |
| 16796 P | 23. | 23. | 25. | 24. | 27. | 28. | 24. | 27. | 26. | 27. | 31. | 30. | 26. |
| 16797 P | 21. | 22. | 22. | 24. | 20. | 21. | 24. | 23. | 24. | 21. | 25. | 20. | 22. |
| 16798 P | 21. | 23. | 22. | 25. | 26. | 21. | 23. | 25. | 24. | 23. | 27. | 23. | 24. |
| 16799 P | 23. | 23. | 26. | 24. | 28. | 28. | 23. | 27. | 26. | 26. | 28. | 28. | 23. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE D37 (PAGE 6): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | |
| 16781 P | 22. | 21. | 24. | 26. | 20. | 22. | 21. | 23. | | | | |
| 16782 P | 26. | 32. | 30. | 26. | 32. | 28. | 27. | 23. | | | | |
| 16783 P | 23. | 20. | 20. | 24. | 20. | 24. | 23. | 23. | 15. | | | |
| 16784 P | 25. | 23. | 21. | 19. | 24. | 29. | 28. | 17. | | | | |
| 16786 P | 26. | 23. | 26. | 20. | 32. | 25. | 27. | 21. | | | | |
| 16787 P | 23. | 27. | 31. | 29. | 30. | 32. | 29. | 25. | | | | |
| 16791 P | 22. | 19. | 23. | 25. | 24. | 27. | 18. | 18. | | | | |
| 16792 P | 18. | 25. | 22. | 27. | 30. | 23. | 27. | 21. | | | | |
| 16793 P | 20. | 24. | 28. | 23. | 28. | 21. | 23. | 18. | | | | |
| 16794 P | 25. | 23. | 28. | 27. | 29. | 21. | 27. | 23. | | | | |
| 16795 P | 26. | 27. | 26. | 22. | 27. | 28. | 27. | 27. | | | | |
| 16796 P | 25. | 26. | 27. | 30. | 23. | 21. | 20. | 25. | | | | |
| 16797 P | 15. | 21. | 25. | 24. | 28. | 26. | 26. | 24. | | | | |
| 16798 P | 21. | 23. | 27. | 23. | 27. | 17. | 20. | 21. | 15. | | | |
| 16799 P | 26. | 25. | 24. | 26. | 25. | 18. | 18. | 18. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE D37 (PAGE 7): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 P | 19. | 19. | 21. | 20. | 17. | 20. | 22. | 17. | 20. | 21. | 18. | 20. | 17. |
| 16801 P | 29. | 24. | 27. | 27. | 28. | 30. | 25. | 30. | 27. | 29. | 29. | 31. | 24. |
| 16802 P | 19. | 22. | 21. | 26. | 24. | 22. | 26. | 26. | 23. | 22. | 23. | 21. | 21. |
| 16803 P | 21. | 22. | 25. | 25. | 24. | 26. | 28. | 27. | 29. | 28. | 26. | 28. | 26. |
| 16805 P | 29. | 22. | 25. | 28. | 21. | 27. | 32. | 26. | 27. | 29. | 26. | 27. | 26. |
| 16806 P | 22. | 21. | 22. | 22. | 19. | 21. | 23. | 19. | 23. | 24. | 21. | 23. | 23. |
| 16807 P | 22. | 21. | 23. | 24. | 22. | 26. | 21. | 25. | 23. | 27. | 26. | 24. | 24. |
| 16808 P | 19. | 21. | 20. | 23. | 22. | 20. | 22. | 22. | 22. | 22. | 22. | 21. | 23. |
| 16810 P | 19. | 23. | 21. | 24. | 17. | 25. | 25. | 21. | 22. | 24. | 21. | 22. | 22. |
| 16811 P | 21. | 23. | 23. | 23. | 27. | 26. | 22. | 23. | 25. | 27. | 28. | 24. | 24. |
| 16814 P | 21. | 19. | 25. | 24. | 22. | 28. | 28. | 25. | 25. | 29. | 22. | 21. | 21. |
| 16815 P | 26. | 24. | 23. | 22. | 22. | 26. | 25. | 21. | 29. | 27. | 23. | 24. | 31. |
| 16817 P | 24. | 22. | 25. | 28. | a | 21. | 18. | a | 24. | 22. | 26. | 24. | 20. |
| 16818 P | 20. | 35. | 24. | 24. | 25. | 17. | 24. | 24. | 25. | 25. | 29. | 24. | 26. |
| 16820 P | 21. | 18. | 26. | 23. | 22. | 26. | 26. | 26. | 23. | 31. | 20. | 24. | 19. |
| 16822 P | 22. | 28. | 24. | 27. | 28. | 26. | 27. | 26. | 28. | 20. | 23. | 24. | 26. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE D37 (PAGE 8): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | |
| 16800 P | 20. | 21. | 22. | 20. | 17. | 22. | 20. | 18. | | | | |
| 16801 P | 27. | 29. | 30. | 31. | 28. | 27. | 27. | 25. | | | | |
| 16802 P | 20. | 23. | 25. | 22. | 26. | 18. | 21. | 23. | | | | |
| 16803 P | 28. | 24. | 27. | 21. | 18. | 22. | 24. | 20. | | | | |
| 16805 P | 27. | 24. | 22. | 29. | 22. | 29. | 25. | 28. | | | | |
| 16806 P | 19. | 23. | 22. | 23. | 25. | 24. | 23. | 19. | | | | |
| 16807 P | 25. | 25. | 27. | 26. | 26. | 28. | 22. | 22. | | | | |
| 16808 P | 19. | 23. | 22. | 22. | 20. | 22. | 23. | 22. | | | | |
| 16810 P | 24. | 24. | 23. | 27. | 21. | 27. | 24. | 22. | 23. | | | |
| 16811 P | 26. | 22. | 20. | 20. | 24. | 23. | 18. | 19. | | | | |
| 16814 P | 23. | 25. | 25. | 28. | 22. | 23. | 21. | 26. | | | | |
| 16815 P | 25. | 25. | 25. | 28. | 28. | 26. | 30. | a | | | | |
| 16817 P | 21. | 21. | 24. | 28. | 25. | 26. | 21. | 22. | | | | |
| 16818 P | 24. | 23. | 25. | 24. | 23. | 21. | 22. | 25. | | | | |
| 16820 P | 22. | 21. | 26. | 24. | 20. | 21. | 11. | 20. | 18. | | | |
| 16822 P | 25. | 27. | 31. | 25. | 28. | 21. | 25. | 22. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE D37 (PAGE 9): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 0 - 1 | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 P | 19. | 17. | 23. | 16. | 20. | 13. | 17. | 20. | 21. | 19. | 19. | 24. | 19. |
| 16825 P | 22. | 21. | 22. | 24. | 19. | 23. | 22. | 23. | 22. | 22. | 22. | 24. | 22. |
| 16826 P | 26. | 29. | 29. | 32. | 28. | 33. | 28. | 32. | 35. | 34. | 28. | 35. | 30. |
| 16827 P | 16. | 21. | 21. | 20. | 23. | 18. | 23. | 22. | 22. | 21. | 26. | 19. | 20. |
| 16828 P | 25. | 28. | 25. | 26. | 23. | 23. | 28. | 25. | 29. | 23. | 27. | 25. | 24. |
| 16830 P | 18. | 24. | 15. | 22. | 25. | 23. | 28. | 21. | 27. | 26. | 24. | 24. | 25. |
| 16831 P | 23. | 20. | 25. | 24. | 21. | 24. | 25. | 24. | 22. | 26. | 28. | 26. | 24. |
| 16833 P | 25. | 25. | 26. | 28. | 27. | 26. | 27. | 29. | 28. | 25. | 29. | 26. | 29. |
| 16834 P | 19. | 21. | 20. | 23. | 23. | 19. | 24. | 24. | 25. | 20. | 25. | 22. | 25. |
| 16836 P | 25. | 26. | 24. | 23. | 27. | 23. | 26. | 27. | 28. | 25. | 31. | 24. | 30. |
| 16837 P | 19. | 20. | 19. | 25. | 24. | 21. | 23. | 23. | 23. | 23. | 27. | 22. | 26. |
| 16839 P | 19. | 21. | 18. | 22. | 21. | 19. | 20. | 21. | 18. | 18. | 24. | 20. | 23. |
| 16840 P | 22. | 21. | 25. | 28. | 26. | 21. | 28. | 27. | 28. | 25. | 27. | 26. | 29. |
| 16842 P | 23. | 25. | 23. | 24. | 23. | 22. | 24. | 22. | 27. | 22. | 25. | 21. | 27. |
| 16843 P | 23. | 20. | 24. | 24. | 22. | 25. | 24. | 23. | 25. | 25. | 21. | 27. | 22. |
| 16844 P | 25. | 26. | 23. | 24. | 28. | 27. | 29. | 30. | 28. | 30. | 30. | 25. | 30. |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

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TABLE D37 (PAGE 10): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| PREGNANCY STATUS DAYS | 13 - 14 | 14 - 15 | 15 - 16 | 16 - 17 | 17 - 18 | 18 - 19 | 19 - 20 | 20 - 21 | 21 - 22 | 22 - 23 | 23 - 24 | 24 - 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | |
| 16823 P | 21. | 20. | 21. | 23. | 22. | 23. | 14. | 16. | | | | |
| 16825 P | 21. | 24. | 23. | 23. | 18. | 23. | 21. | 22. | | | | |
| 16826 P | 30. | 28. | 32. | 30. | 23. | 26. | 24. | 22. | | | | |
| 16827 P | 21. | 23. | 23. | 21. | 25. | 15. | 22. | 20. | 21. | | | |
| 16828 P | 26. | 27. | 31. | 29. | 34. | 25. | 24. | 25. | | | | |
| 16830 P | 23. | 26. | 25. | 29. | 27. | 28. | 26. | 14. | | | | |
| 16831 P | 26. | 26. | 24. | 26. | 22. | 25. | 23. | 23. | | | | |
| 16833 P | 22. | 28. | 28. | 25. | 28. | 26. | 30. | 24. | | | | |
| 16834 P | 17. | 24. | 23. | 21. | 23. | 18. | 21. | 22. | | | | |
| 16836 P | 24. | 27. | 28. | 26. | 29. | 22. | 25. | 25. | | | | |
| 16837 P | 25. | 24. | 22. | 25. | 29. | 21. | 26. | 26. | | | | |
| 16839 P | 21. | 23. | 23. | 20. | 27. | 19. | 24. | 24. | | | | |
| 16840 P | 23. | 27. | 24. | 27. | 26. | 21. | 27. | 24. | 21. | | | |
| 16842 P | 21. | 27. | 27. | 27. | 31. | 16. | 23. | 19. | | | | |
| 16843 P | 24. | 26. | 25. | 26. | 16. | 26. | 23. | 23. | | | | |
| 16844 P | 27. | 27. | 32. | 29. | 30. | 27. | 26. | 27. | | | | |

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)
DAYS = DAYS OF PRESUMED GESTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D38 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP I | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | |
| 16731 | 8. | 18. | 20. | 28. | 34. | 32. | 33. | 28. | 35. | 44. | 49. | 99. | 44. |
| 16732 | 21. | 20. | 30. | 36. | 34. | 35. | 35. | 40. | 36. | 51. | 44. | 47. | 50. |
| 16734 | 25. | 37. | 40. | 46. | 41. | 47. | 43. | 50. | 54. | 56. | 68. | 61. | 65. |
| 16735 | 25. | 26. | 32. | 43. | 23. | 49. | 46. | 47. | 55. | 57. | 57. | 66. | 62. |
| 16736 | 24. | 29. | 69. | a | 51. | 89. | a | 43. | 43. | 77. | 51. | 64. | 51. |
| 16737 | 17. | 25. | 30. | 44. | 44. | 57. | 47. | 53. | 58. | 57. | 64. | 65. | 58. |
| 16738 | 24. | 31. | 31. | 45. | 47. | 48. | 43. | 48. | 45. | 57. | 58. | 60. | 63. |
| 16740 | 10. | 18. | 19. | a | 26. | 22. | 25. | 36. | 51. | 51. | 42. | 59. | 36. |
| 16741 | 19. | 26. | 27. | 40. | 37. | 39. | 37. | 44. | 44. | 50. | 53. | 59. | 61. |
| 16742 | 13. | 43. | 13. | 36. | 36. | 38. | 47. | 39. | 50. | 52. | 58. | 60. | 51. |
| 16745 | 25. | 36. | 41. | a | 48. | 42. | 41. | 36. | 50. | 49. | 53. | 59. | 63. |
| 16746 | 23. | 25. | 24. | 33. | 50. | 34. | 29. | 40. | 36. | 41. | 38. | 56. | 51. |
| 16747 | 28. | 32. | 29. | 37. | 39. | 37. | 47. | 48. | 45. | 51. | 62. | 70. | 56. |
| 16749 | 28. | 31. | 36. | 40. | 32. | 30. | 32. | 45. | 42. | 54. | 52. | 60. | 61. |
| 16750 | 22. | 25. | 36. | 38. | 44. | 49. | 49. | 48. | 46. | 59. | 66. | 40. | 73. |
| 16753 | 9. | 15. | 21. | 25. | 32. | 36. | 35. | 39. | 42. | 45. | 50. | 52. | 54. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

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TABLE D38 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP II | | | | 0.01 MG/KG/DAY | | | | | | | | |
| 16755 | 24. | 23. | 24. | 36. | 39. | 35. | 35. | 47. | 45. | 52. | 63. | 54. | 54. |
| 16758 | 22. | 29. | 33. | 40. | 38. | 42. | 37. | 37. | 42. | 47. | 53. | 59. | 55. |
| 16760 | 33. | 24. | 39. | 49. | 45. | 38. | 43. | 44. | 52. | 52. | 69. | 65. | 63. |
| 16761 | 13. | 27. | 33. | 27. | 38. | 47. | 43. | 45. | 48. | 53. | 56. | 59. | 63. |
| 16762 | 23. | 28. | 29. | 39. | 40. | 40. | 45. | 47. | 55. | 51. | 49. | a | 53. |
| 16763 | 22. | 31. | 42. | 51. | 53. | 53. | 52. | 62. | 65. | 66. | 68. | 68. | 73. |
| 16764 | 32. | 39. | 43. | 38. | 40. | 46. | 48. | 51. | 59. | 53. | 61. | 65. | 65. |
| 16765 | 23. | 30. | 42. | 39. | 42. | 43. | 46. | 53. | 54. | 53. | 57. | 59. | 58. |
| 16767 | 21. | 30. | 34. | 43. | 45. | 43. | 49. | 61. | 52. | 55. | 61. | 66. | 73. |
| 16768 | 26. | 25. | 39. | 52. | 44. | 47. | 55. | 53. | 63. | 60. | 81. | 75. | 72. |
| 16769 | 23. | 21. | 30. | 32. | 45. | 45. | 41. | 49. | 45. | 54. | 61. | 64. | 61. |
| 16770 | 30. | 34. | 35. | 57. | 48. | 41. | 41. | 47. | 61. | 60. | 55. | 68. | 61. |
| 16771 | 23. | 29. | 34. | 38. | 42. | 44. | 42. | 45. | 58. | 53. | 67. | 54. | 69. |
| 16773 | 22. | 30. | 55. | 51. | 47. | 45. | 51. | 61. | 63. | a | 70. | 73. | 70. |
| 16774 | 19. | 18. | 24. | 31. | 36. | 39. | 38. | 40. | 46. | 49. | 56. | 54. | 65. |
| 16776 | 51. | 49. | 44. | 42. | 38. | 35. | 59. | 50. | 47. | 51. | 58. | 57. | 59. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D38 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP III | | | | 0.1 MG/KG/DAY | | | | | | | | |
| 16781 | 21. | 26. | 29. | 52. | 53. | 43. | 46. | 51. | 50. | 57. | 67. | 58. | 62. |
| 16782 | 28. | 37. | 48. | 50. | 48. | 41. | 48. | 57. | 57. | 69. | 63. | 66. | 74. |
| 16783 | 13. | 27. | 35. | 41. | 42. | 44. | 48. | 51. | 57. | 61. | 68. | 71. | 62. |
| 16784 | 21. | 24. | 29. | 34. | a | 40. | 32. | 56. | 77. | 48. | 56. | 48. | 61. |
| 16786 | 28. | 35. | 41. | 45. | 40. | 40. | 44. | 60. | 54. | 62. | 64. | a | 66. |
| 16787 | 21. | 28. | 25. | 42. | 40. | 43. | 38. | 46. | 54. | 54. | 61. | 59. | 58. |
| 16791 | 24. | 26. | 30. | 37. | 37. | 44. | 52. | 47. | 51. | 48. | 59. | 65. | 58. |
| 16792 | 22. | 26. | 22. | 30. | 34. | 26. | 31. | 39. | 47. | 44. | 44. | 47. | 59. |
| 16793 | 22. | 25. | 29. | 25. | 41. | 37. | 42. | 41. | 46. | 58. | 60. | 61. | 56. |
| 16794 | 21. | 25. | 33. | 41. | 34. | 40. | 38. | 45. | 48. | 51. | 64. | 57. | 59. |
| 16795 | 23. | 33. | 63. | 48. | 46. | 52. | 53. | 55. | 58. | 63. | 65. | 70. | 59. |
| 16796 | 14. | 26. | 27. | 29. | 40. | 43. | 42. | 52. | 53. | 57. | 57. | 53. | 62. |
| 16797 | 18. | 30. | 56. | 59. | 43. | 90.b | 169.b | a | 129.b | a | 62. | 74. | 68. |
| 16798 | 17. | 25. | 32. | 46. | 44. | 31. | 42. | 48. | 52. | 64. | 56. | 64. | 55. |
| 16799 | 30. | 33. | 34. | a | 39. | 43. | 66. | 60. | 52. | 61. | 50. | 69. | 62. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.
b. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D38 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP IV | | | | 1.0 MG/KG/DAY | | | | | | | | |
| 16800 | 23. | 26. | 31. | 43. | 38. | 38. | 39. | 43. | 46. | 55. | 53. | 52. | 55. |
| 16801 | 28. | 47. | 89. | a | 49. | 41. | a | 58. | 59. | 64. | 68. | 69. | 80. |
| 16802 | 26. | 30. | 37. | 47. | 35. | 31. | 29. | 44. | 41. | 53. | 60. | 56. | 59. |
| 16803 | 29. | 33. | 38. | 47. | 53. | 40. | 46. | 46. | 55. | 71. | 56. | 68. | 57. |
| 16805 | 28. | 34. | 39. | 44. | 44. | 41. | 45. | 46. | 56. | 67. | 62. | 60. | 62. |
| 16806 | 16. | 37. | 32. | 39. | 42. | 43. | 43. | 51. | 49. | 56. | 47. | 50. | 66. |
| 16807 | 30. | 31. | 27. | 26. | 38. | 46. | 36. | 46. | 44. | 47. | 49. | 39. | 60. |
| 16808 | 22. | 29. | 31. | 37. | 32. | 41. | 38. | 43. | 46. | 42. | 59. | 59. | 50. |
| 16810 | 16. | 33. | 35. | 38. | 36. | 36. | 46. | 46. | 50. | 62. | 58. | 64. | 58. |
| 16811 | 17. | 27. | 29. | 28. | 33. | 39. | 48. | 43. | 48. | 47. | 54. | 55. | 52. |
| 16814 | 23. | 33. | 41. | 38. | 46. | 47. | 44. | 47. | 49. | 55. | 57. | 58. | 50. |
| 16815 | 38. | 42. | 44. | 43. | 56. | 44. | 47. | 58. | 68. | 61. | 58. | a | 80. |
| 16817 | 34. | 29. | 33. | 60. | 41. | 39. | 50. | 63. | 52. | 61. | 60. | 103.b | 63. |
| 16818 | 30. | 33. | 42. | 45. | 44. | 42. | 48. | 50. | 54. | 56. | 59. | 62. | 68. |
| 16820 | 12. | 28. | 30. | 34. | 38. | 36. | 44. | 40. | 49. | 54. | 52. | 62. | 54. |
| 16822 | 23. | 22. | 38. | 32. | 39. | 40. | 42. | 44. | 48. | 51. | 60. | 54. | 61. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.
b. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D38 (PAGE 5): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - P GENERATION FEMALE RATS - PART C

| DAY | 1 - 2 | 2 - 3 | 3 - 4 | 4 - 5 | 5 - 6 | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10 - 11 | 11 - 12 | 12 - 13 | 13 - 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT # | DOSAGE GROUP V | | | | 30.0 MG/KG/DAY | | | | | | | | |
| 16823 | 15. | 25. | 26. | 33. | 34. | 41. | 29. | 46. | 48. | 40. | 46. | 65. | 54. |
| 16825 | 28. | 27. | 36. | 36. | 38. | 37. | 40. | 48. | 50. | 57. | 57. | 58. | 60. |
| 16826 | 25. | 35. | 38. | 47. | 42. | 43. | 49. | 46. | 53. | 67. | 65. | 64. | 66. |
| 16827 | 28. | 79. | 45. | 41. | 41. | 42. | 44. | 45. | a | 59. | 56. | 60. | 61. |
| 16828 | 23. | 38. | 43. | 44. | 40. | 47. | 33. | 44. | 58. | 58. | 71. | 71. | 70. |
| 16830 | 17. | 33. | 35. | 40. | 42. | 46. | 47. | 57. | 48. | 59. | 52. | 59. | 74. |
| 16831 | 16. | 31. | b | 31. | 44. | 47. | 42. | 47. | 50. | 56. | 58. | 65. | 62. |
| 16833 | 24. | 24. | 29. | 26. | 31. | 35. | 39. | 43. | 42. | 43. | 59. | 51. | 52. |
| 16834 | 15. | 19. | 33. | 35. | 37. | 35. | 43. | 40. | 40. | 50. | 62. | 63. | 65. |
| 16836 | 23. | 26. | 41. | 41. | 41. | 46. | 46. | 52. | 54. | 57. | 64. | 59. | 65. |
| 16837 | 31. | 34. | 38. | 42. | 41. | 43. | 39. | 51. | 50. | 57. | 59. | 63. | 70. |
| 16839 | 20. | 30. | 38. | 38. | 31. | 35. | 32. | 37. | 47. | 47. | 54. | 54. | 55. |
| 16840 | 23. | 34. | 47. | 45. | 52. | 45. | 49. | 53. | 66. | 69. | 73. | 75. | 62. |
| 16842 | 24. | 27. | 28. | 60. | 51. | 53. | 47. | 58. | 55. | 60. | 67. | 69. | 70. |
| 16843 | 30. | 61. | 18. | 41. | 43. | 38. | 45. | 47. | 48. | 53. | 55. | 62. | 56. |
| 16844 | 25. | 27. | 38. | 38. | 44. | 47. | 42. | 54. | 58. | a | 63. | 67. | 60. |

DAY = DAY OF LACTATION
ALL WEIGHTS WERE RECORDED IN GRAMS (G).
a. Spilled feed precluded the calculation of this value.
b. Value was not recorded.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D39 (PAGE 1): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART C

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 14 M | 14 F | 22 M | 22 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16731 | 23 | 12 | 0 | 12 | 8 | 4 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16732 | 23 | 18 | 0 | 18 | 4 | 14 | 4 | 14 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16734 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16735 | 23 | 15 | 0 | 15 | 9 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16736 | 23 | 14 | 0 | 14 | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16737 | 23 | 16 | 0 | 16 | 7 | 9 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16738 | 23 | 14 | 0 | 14 | 10 | 4 | 10 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 16 |
| 16740 | 23 | 16 | 1 | 17 | 4 | 12 | 4 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16741 | 23 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16742 | 23 | 15 | 1 | 16 | 10 | 5 | 10 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16745 | 23 | 16 | 0 | 16 | 9 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16746 | 22 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 15 |
| 16747 | 22 | 15 | 0 | 15 | 5 | 10 | 5 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16749 | 22 | 16 | 0 | 16 | 10 | 6 | 10 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16750 | 23 | 16 | 0 | 16 | 7 | 9 | 7 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16753 | 23 | 15(1) | 0 | 15 | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
a. Number of live pups preculling.
b. Number of live pups postculling.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D39 (PAGE 2): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART C

DOSAGE GROUP II 0.01 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) | LITTER DELIVERED | | | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM | | | | | | | | | | | | TOTAL IMPLAN- TATIONS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LIVE BORN | STILL- BORN | TOTAL BORN | 1 | | 5a | | 5b | | 8 | | 14 | | 22 | | |
| | N | N | N | N | M | F | M | F | M | F | M | F | M | F | M | F | N |
| 16755 | 23 | 17 | 0 | 17 | 5 | 12 | 5 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16758 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16760 | 23 | 14 | 0 | 14 | 10 | 4 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16761 | 22 | 12 | 0 | 12 | 7 | 5 | 7 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 13 |
| 16762 | 23 | 14 | 0 | 14 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16763 | 23 | 14 | 1 | 15 | 8 | 6 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16764 | 22 | 14 | 0 | 14 | 4 | 10 | 4 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16765 | 23 | 13 | 1 | 14 | 7 | 6 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16767 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16768 | 23 | 16 | 0 | 16 | 9 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16769 | 23 | 16 | 0 | 16 | 10 | 6 | 10 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16770 | 23 | 15 | 0 | 15 | 7 | 8 | 7 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16771 | 22 | 14 | 0 | 14 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16773 | 23 | 15 | 0 | 15 | 4 | 11 | 4 | 11 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16774 | 23 | 13 | 0 | 13 | 6 | 7 | 6 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 13 |
| 16776 | 23 | 16 | 0 | 16 | 10 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |

M = MALE F = FEMALE
a. Number of live pups preculling.
b. Number of live pups postculling.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D39 (PAGE 3): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART C

DOSAGE GROUP III 0.1 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 14 M | 14 F | 22 M | 22 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16781 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16782 | 23 | 17 | 0 | 17 | 9 | 8 | 9 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16783 | 23 | 17 | 0 | 17 | 7 | 10 | 7 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16784 | 23 | 12 | 0 | 12 | 7 | 5 | 7 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16786 | 22 | 14 | 0 | 14 | 3 | 11 | 3 | 11 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 5 | 17 |
| 16787 | 23 | 16 | 0 | 16 | 7 | 9 | 7 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16791 | 23 | 11 | 0 | 11 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 12 |
| 16792 | 22 | 13 | 0 | 13 | 6 | 7 | 6 | 7 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 15 |
| 16793 | 23 | 11 | 0 | 11 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 11 |
| 16794 | 22 | 16 | 0 | 16 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16795 | 23 | 18(1) | 0 | 18 | 10 | 7 | 10 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16796 | 22 | 11 | 0 | 11 | 7 | 4 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 12 |
| 16797 | 23 | 16 | 0 | 16 | 11 | 5 | 11 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16798 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16799 | 22 | 15 | 0 | 15 | 9 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
a. Number of live pups preculling.
b. Number of live pups postculling.

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TABLE D39 (PAGE 4): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART C

DOSAGE GROUP IV 1.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 14 M | 14 F | 22 M | 22 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16800 | 22 | 13 | 0 | 13 | 7 | 6 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16801 | 22 | 18 | 0 | 18 | 6 | 12 | 6 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16802 | 23 | 15 | 0 | 15 | 5 | 10 | 5 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16803 | 22 | 16 | 0 | 16 | 4 | 12 | 4 | 12 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 19 |
| 16805 | 23 | 14 | 1 | 16[1] | 9 | 5 | 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16806 | 23 | 15 | 0 | 15 | 5 | 10 | 5 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16807 | 22 | 16 | 0 | 16 | 9 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16808 | 22 | 13 | 0 | 13 | 6 | 7 | 6 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16810 | 23 | 14 | 1 | 15 | 6 | 8 | 6 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16811 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16814 | 23 | 14 | 0 | 14 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16815 | 23 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16817 | 23 | 17 | 0 | 17 | 11 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16818 | 22 | 15 | 0 | 15 | 8 | 7 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16820 | 23 | 13 | 1 | 14 | 7 | 6 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16822 | 23 | 13 | 0 | 13 | 5 | 8 | 5 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
[ ] = Number of pups in which cannibalization and/or autolysis precluded the determination of viability.
a. Number of live pups preculling.
b. Number of live pups postculling.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D39 (PAGE 5): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - P GENERATION FEMALE RATS/F1 GENERATION LITTERS - PART C

DOSAGE GROUP V 30.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DURATION OF GESTATION (DAYS) N | LITTER DELIVERED LIVE BORN N | STILL-BORN N | TOTAL BORN N | NUMBER OF LIVE PUPS AT COMPLETION OF DAY POSTPARTUM 1 M | 1 F | 5a M | 5a F | 5b M | 5b F | 8 M | 8 F | 14 M | 14 F | 22 M | 22 F | TOTAL IMPLAN-TATIONS N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16823 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16825 | 22 | 15 | 0 | 15 | 9 | 6 | 9 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16826 | 22 | 18(1) | 0 | 18 | 11 | 6 | 10 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16827 | 24 | 15 | 0 | 15 | 8 | 7 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16828 | 23 | 16 | 0 | 16 | 6 | 10 | 6 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16830 | 23 | 14 | 0 | 14 | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 14 |
| 16831 | 23 | 17(1) | 0 | 17 | 5 | 11 | 5 | 11 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16833 | 23 | 17 | 0 | 17 | 9 | 8 | 9 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16834 | 23 | 17 | 0 | 17 | 9 | 8 | 9 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |
| 16836 | 23 | 14 | 3 | 17 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16837 | 23 | 20 | 0 | 20 | 10 | 10 | 10 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 21 |
| 16839 | 23 | 13 | 0 | 13 | 8 | 5 | 8 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 18 |
| 16840 | 23 | 13 | 0 | 13 | 8 | 5 | 8 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 16 |
| 16842 | 23 | 14 | 0 | 14 | 8 | 6 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 15 |
| 16843 | 23 | 15 | 0 | 15 | 5 | 10 | 5 | 10 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 15 |
| 16844 | 23 | 16 | 0 | 16 | 9 | 7 | 9 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 17 |

M = MALE F = FEMALE
( ) = Number of pups dying prior to weighing on day 1 postpartum.
a. Number of live pups preculling.
b. Number of live pups postculling.

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TABLE D40 (PAGE 1): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART C

DOSAGE GROUP I 0 (CARRIER) MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 14 | | | DAY 22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16731 | 6.7 | 6.4 | 6.6 | 9.8 | 9.8 | 9.8 | 9.9 | 9.8 | 9.8 | 15.2 | 15.1 | 15.2 | 27.1 | 25.9 | 26.5 | 46.2 | 44.9 | 45.5 |
| 16732 | 6.1 | 6.0 | 6.0 | 9.1 | 9.0 | 9.0 | 9.1 | 9.9 | 9.5 | 15.3 | 16.2 | 15.8 | 28.4 | 29.6 | 29.0 | 47.7 | 49.2 | 48.5 |
| 16734 | 7.8 | 7.4 | 7.6 | 11.3 | 10.8 | 11.0 | 11.1 | 11.4 | 11.2 | 18.0 | 18.4 | 18.2 | 32.6 | 33.3 | 32.9 | 58.0 | 57.8 | 57.9 |
| 16735 | 5.9 | 5.7 | 5.8 | 9.1 | 8.5 | 8.9 | 9.0 | 8.1 | 8.5 | 14.9 | 13.8 | 14.3 | 29.6 | 28.4 | 29.0 | 50.8 | 50.7 | 50.8 |
| 16736 | 6.5 | 6.1 | 6.3 | 8.8 | 8.1 | 8.5 | 8.7 | 8.1 | 8.4 | 11.0 | 9.8 | 10.4 | 21.6 | 19.8 | 20.7 | 36.4 | 35.8 | 36.1 |
| 16737 | 6.7 | 6.0 | 6.3 | 9.0 | 8.0 | 8.4 | 8.6 | 7.8 | 8.2 | 12.8 | 12.8 | 12.8 | 28.4 | 28.6 | 28.4 | 50.6 | 48.5 | 49.5 |
| 16738 | 6.3 | 5.8 | 6.1 | 10.1 | 9.6 | 10.0 | 10.1 | 9.6 | 9.9 | 17.3 | 16.4 | 16.9 | 31.8 | 30.4 | 31.2 | 57.0 | 52.3 | 55.2 |
| 16740 | 6.2 | 5.8 | 5.9 | 7.5 | 7.5 | 7.5 | 7.5 | 7.1 | 7.3 | 12.2 | 11.8 | 12.0 | 24.8 | 22.3 | 23.6 | 41.0 | 38.2 | 39.6 |
| 16741 | 6.9 | 6.6 | 6.7 | 9.2 | 8.6 | 8.8 | 9.4 | 8.4 | 8.9 | 14.8 | 13.9 | 14.4 | 26.4 | 25.6 | 26.0 | 44.6 | 42.2 | 43.4 |
| 16742 | 6.4 | 5.8 | 6.2 | 9.4 | 8.6 | 9.2 | 9.6 | 8.5 | 9.0 | 15.9 | 14.0 | 15.0 | 31.3 | 29.2 | 30.3 | 52.4 | 49.1 | 50.8 |
| 16745 | 6.3 | 5.9 | 6.1 | 9.2 | 8.8 | 9.0 | 9.0 | 8.6 | 8.8 | 13.6 | 12.7 | 13.1 | 27.4 | 27.6 | 27.5 | 48.5 | 37.3 | 42.9 |
| 16746 | 5.8 | 5.7 | 5.7 | 8.0 | 7.8 | 7.9 | 7.9 | 7.8 | 7.8 | 7.5 | 7.7 | 7.6 | 18.7 | 15.8 | 17.4 | 38.4 | 34.7 | 36.8 |
| 16747 | 6.3 | 6.1 | 6.2 | 9.2 | 9.0 | 9.0 | 9.2 | 8.8 | 9.0 | 15.2 | 14.0 | 14.6 | 30.7 | 28.2 | 29.4 | 52.4 | 48.9 | 50.6 |
| 16749 | 6.1 | 5.7 | 6.0 | 9.0 | 8.6 | 8.9 | 9.8 | 8.7 | 9.3 | 15.6 | 13.7 | 14.6 | 29.2 | 25.8 | 27.5 | 47.2 | 43.2 | 45.2 |
| 16750 | 6.6 | 6.4 | 6.5 | 9.7 | 9.8 | 9.8 | 9.4 | 9.7 | 9.6 | 16.0 | 16.4 | 16.2 | 31.8 | 31.5 | 31.7 | 52.7 | 52.0 | 52.3 |
| 16753 | 6.3 | 6.3 | 6.3 | 8.6 | 8.5 | 8.6 | 8.6 | 8.4 | 8.5 | 13.4 | 13.5 | 13.5 | 26.3 | 25.8 | 26.1 | 45.2 | 46.0 | 45.6 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE D40 (PAGE 2): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART C

DOSAGE GROUP II 0.01 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 14 | | | DAY 22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16755 | 6.6 | 6.3 | 6.4 | 9.1 | 8.8 | 8.9 | 9.3 | 8.5 | 8.9 | 15.4 | 14.3 | 14.8 | 30.2 | 28.6 | 29.4 | 50.8 | 50.0 | 50.4 |
| 16758 | 6.9 | 6.4 | 6.6 | 10.0 | 9.1 | 9.5 | 10.1 | 9.0 | 9.6 | 13.8 | 13.0 | 13.4 | 25.8 | 24.4 | 25.1 | 49.1 | 45.2 | 47.1 |
| 16760 | 7.2 | 6.3 | 6.9 | 10.5 | 9.2 | 10.1 | 10.3 | 9.2 | 9.8 | 15.6 | 11.0 | 13.3 | 30.2 | 23.8 | 27.0 | 54.9 | 44.9 | 49.9 |
| 16761 | 6.4 | 5.9 | 6.2 | 10.0 | 9.1 | 9.6 | 9.9 | 9.3 | 9.6 | 15.6 | 14.4 | 15.0 | 31.2 | 28.1 | 29.6 | 52.2 | 48.5 | 50.3 |
| 16762 | 6.0 | 5.7 | 5.9 | 9.5 | 9.3 | 9.4 | 9.6 | 9.4 | 9.5 | 16.4 | 14.9 | 15.6 | 29.0 | 28.2 | 28.6 | 46.8 | 44.6 | 45.7 |
| 16763 | 6.8 | 6.5 | 6.6 | 10.6 | 10.2 | 10.4 | 10.5 | 10.3 | 10.4 | 16.9 | 17.0 | 17.0 | 33.9 | 34.1 | 34.0 | 60.5 | 58.4 | 59.5 |
| 16764 | 6.4 | 6.1 | 6.2 | 9.7 | 9.5 | 9.6 | 9.7 | 9.8 | 9.7 | 16.4 | 16.4 | 16.4 | 31.4 | 31.4 | 31.4 | 54.8 | 54.2 | 54.5 |
| 16765 | 6.6 | 6.1 | 6.4 | 10.1 | 9.7 | 9.9 | 10.2 | 9.6 | 9.9 | 16.6 | 15.7 | 16.2 | 30.2 | 28.8 | 29.5 | 50.2 | 47.8 | 49.0 |
| 16767 | 6.4 | 6.4 | 6.4 | 9.7 | 9.8 | 9.7 | 9.8 | 10.4 | 10.1 | 16.2 | 17.6 | 16.9 | 32.5 | 34.5 | 33.5 | 56.4 | 58.6 | 57.5 |
| 16768 | 7.2 | 6.6 | 6.9 | 9.9 | 8.7 | 9.4 | 10.3 | 8.6 | 9.4 | 17.9 | 15.0 | 16.4 | 36.3 | 31.9 | 34.1 | 61.7 | 55.8 | 58.8 |
| 16769 | 6.4 | 6.2 | 6.3 | 9.3 | 9.3 | 9.3 | 9.4 | 9.2 | 9.3 | 14.9 | 15.4 | 15.2 | 30.8 | 29.2 | 30.0 | 52.8 | 51.1 | 51.9 |
| 16770 | 6.8 | 6.4 | 6.6 | 11.5 | 10.8 | 11.1 | 11.2 | 10.5 | 10.9 | 18.6 | 17.2 | 17.9 | 35.2 | 33.1 | 34.1 | 58.2 | 55.5 | 56.8 |
| 16771 | 6.5 | 6.2 | 6.3 | 10.1 | 9.4 | 9.8 | 10.2 | 9.6 | 9.9 | 17.2 | 16.0 | 16.6 | 33.4 | 31.0 | 32.2 | 56.9 | 54.0 | 55.4 |
| 16773 | 6.6 | 6.4 | 6.5 | 9.5 | 9.3 | 9.4 | 9.5 | 9.0 | 9.3 | 15.9 | 15.8 | 15.8 | 32.4 | 32.0 | 32.2 | 49.6 | 49.9 | 49.8 |
| 16774 | 6.9 | 6.7 | 6.8 | 9.9 | 9.7 | 9.8 | 9.8 | 9.7 | 9.8 | 15.6 | 14.8 | 15.2 | 29.4 | 28.8 | 29.1 | 50.6 | 49.6 | 50.1 |
| 16776 | 6.4 | 6.4 | 6.4 | 9.0 | 9.1 | 9.0 | 8.8 | 8.9 | 8.8 | 14.6 | 14.8 | 14.7 | 28.1 | 28.5 | 28.3 | 48.8 | 49.0 | 48.9 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE D40 (PAGE 3): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART C

DOSAGE GROUP III 0.1 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 14 | | | DAY 22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16781 | 6.0 | 6.1 | 6.0 | 8.5 | 8.6 | 8.6 | 8.3 | 8.6 | 8.4 | 14.6 | 14.5 | 14.5 | 29.4 | 28.2 | 28.8 | 48.6 | 45.8 | 47.2 |
| 16782 | 6.0 | 5.8 | 5.9 | 10.0 | 9.7 | 9.9 | 9.4 | 10.0 | 9.7 | 17.2 | 17.5 | 17.3 | 33.8 | 33.5 | 33.6 | 59.3 | 58.6 | 58.9 |
| 16783 | 6.6 | 6.0 | 6.2 | 9.4 | 8.5 | 8.9 | 9.3 | 8.6 | 9.0 | 15.8 | 14.4 | 15.1 | 32.9 | 31.0 | 31.9 | 55.9 | 51.2 | 53.6 |
| 16784 | 7.0 | 6.5 | 6.8 | 10.4 | 10.3 | 10.3 | 9.6 | 10.0 | 9.8 | 14.5 | 16.9 | 15.7 | 28.8 | 30.5 | 29.6 | 53.0 | 57.0 | 55.0 |
| 16786 | 6.0 | 5.6 | 5.7 | 9.8 | 9.6 | 9.7 | 9.8 | 9.9 | 9.9 | 16.1 | 15.9 | 16.0 | 31.3 | 31.0 | 31.1 | 50.5 | 48.7 | 49.4 |
| 16787 | 6.2 | 5.8 | 6.0 | 8.5 | 8.4 | 8.4 | 8.2 | 8.6 | 8.4 | 14.2 | 14.2 | 14.2 | 29.1 | 29.3 | 29.2 | 52.1 | 50.7 | 51.4 |
| 16791 | 7.1 | 6.6 | 6.9 | 11.3 | 10.8 | 11.0 | 11.7 | 10.9 | 11.3 | 18.2 | 17.0 | 17.6 | 32.4 | 30.9 | 31.6 | 54.5 | 51.8 | 53.1 |
| 16792 | 5.5 | 5.4 | 5.4 | 8.5 | 8.8 | 8.7 | 8.8 | 8.8 | 8.8 | 15.2 | 13.1 | 14.3 | 28.8 | 25.7 | 27.4 | 47.7 | 42.9 | 45.6 |
| 16793 | 6.8 | 6.5 | 6.7 | 10.8 | 10.1 | 10.5 | 10.8 | 10.2 | 10.5 | 16.8 | 16.5 | 16.7 | 31.8 | 30.7 | 31.2 | 52.6 | 52.2 | 52.4 |
| 16794 | 6.3 | 5.7 | 6.0 | 9.2 | 8.5 | 8.8 | 9.2 | 8.4 | 8.8 | 14.9 | 13.5 | 14.2 | 28.8 | 27.4 | 28.1 | 48.2 | 47.0 | 47.6 |
| 16795 | 6.0 | 6.0 | 6.0 | 8.5 | 8.6 | 8.6 | 8.8 | 8.6 | 8.7 | 16.0 | 15.2 | 15.6 | 32.7 | 29.6 | 31.2 | 53.1 | 49.8 | 51.4 |
| 16796 | 5.8 | 5.7 | 5.7 | 9.2 | 8.7 | 9.0 | 9.4 | 8.7 | 9.0 | 15.5 | 14.4 | 15.0 | 30.2 | 28.2 | 29.2 | 48.3 | 45.7 | 47.0 |
| 16797 | 6.8 | 6.5 | 6.8 | 9.2 | 8.3 | 9.0 | 9.3 | 8.3 | 8.8 | 14.3 | 12.7 | 13.5 | 29.6 | 26.5 | 28.0 | 51.2 | 46.0 | 48.6 |
| 16798 | 7.5 | 6.7 | 7.1 | 9.7 | 9.1 | 9.4 | 9.5 | 9.2 | 9.3 | 13.2 | 13.4 | 13.3 | 29.6 | 26.7 | 28.1 | 49.7 | 46.4 | 48.0 |
| 16799 | 6.4 | 5.9 | 6.2 | 9.6 | 9.2 | 9.5 | 9.1 | 9.1 | 9.1 | 15.8 | 16.0 | 15.9 | 32.2 | 32.9 | 32.5 | 57.1 | 57.5 | 57.3 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE D40 (PAGE 4): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART C

DOSAGE GROUP IV 1.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 14 | | | DAY 22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16800 | 6.4 | 5.9 | 6.2 | 8.6 | 8.6 | 8.6 | 8.5 | 8.7 | 8.6 | 13.8 | 14.4 | 14.1 | 26.4 | 27.7 | 27.0 | 42.6 | 44.3 | 43.4 |
| 16801 | 5.5 | 5.2 | 5.3 | 8.8 | 8.4 | 8.5 | 8.6 | 7.6 | 8.2 | 14.9 | 13.0 | 13.9 | 32.2 | 29.5 | 30.9 | 52.2 | 49.4 | 50.8 |
| 16802 | 6.7 | 6.2 | 6.4 | 10.1 | 9.4 | 9.7 | 10.1 | 9.4 | 9.7 | 15.5 | 14.3 | 14.9 | 29.5 | 27.7 | 28.6 | 52.2 | 47.8 | 50.0 |
| 16803 | 6.7 | 6.0 | 6.2 | 10.8 | 9.9 | 10.1 | 10.8 | 9.8 | 10.3 | 17.9 | 16.3 | 17.1 | 34.4 | 32.6 | 33.5 | 49.4 | 48.2 | 48.8 |
| 16805 | 6.5 | 6.2 | 6.4 | 11.0 | 10.7 | 10.8 | 11.1 | 10.6 | 10.8 | 17.8 | 16.8 | 17.3 | 33.6 | 31.9 | 32.7 | 56.2 | 51.1 | 53.7 |
| 16806 | 6.7 | 6.1 | 6.3 | 9.8 | 9.5 | 9.6 | 9.7 | 9.2 | 9.4 | 16.4 | 15.2 | 15.8 | 30.5 | 29.2 | 29.9 | 53.5 | 52.1 | 52.8 |
| 16807 | 6.3 | 6.1 | 6.2 | 9.4 | 9.0 | 9.2 | 9.1 | 9.1 | 9.1 | 13.4 | 13.7 | 13.5 | 26.6 | 27.6 | 27.1 | 47.8 | 48.7 | 48.3 |
| 16808 | 6.6 | 6.0 | 6.3 | 10.0 | 9.4 | 9.7 | 9.9 | 9.1 | 9.5 | 15.9 | 14.6 | 15.3 | 28.4 | 27.4 | 27.8 | 46.7 | 44.9 | 45.8 |
| 16810 | 6.9 | 6.3 | 6.6 | 10.0 | 9.7 | 9.8 | 10.0 | 9.3 | 9.6 | 16.2 | 15.0 | 15.6 | 30.2 | 28.6 | 29.4 | 53.8 | 50.4 | 52.0 |
| 16811 | 6.2 | 6.1 | 6.2 | 9.0 | 8.7 | 8.9 | 8.7 | 8.8 | 8.7 | 14.8 | 14.6 | 14.7 | 28.8 | 29.0 | 28.9 | 49.8 | 49.0 | 49.4 |
| 16814 | 6.4 | 6.0 | 6.2 | 10.7 | 10.3 | 10.5 | 10.7 | 10.3 | 10.5 | 18.0 | 17.8 | 17.9 | 34.0 | 33.4 | 33.7 | 54.8 | 52.8 | 53.8 |
| 16815 | 6.6 | 6.4 | 6.6 | 10.8 | 10.6 | 10.7 | 11.1 | 10.9 | 11.0 | 18.3 | 17.9 | 18.1 | 35.2 | 34.2 | 34.8 | 58.1 | 57.2 | 57.6 |
| 16817 | 6.6 | 5.8 | 6.3 | 10.1 | 8.4 | 9.4 | 10.0 | 7.7 | 8.8 | 17.1 | 12.9 | 15.0 | 32.4 | 24.3 | 28.3 | 54.4 | 42.1 | 48.3 |
| 16818 | 6.4 | 6.1 | 6.2 | 10.3 | 10.0 | 10.1 | 10.4 | 9.9 | 10.2 | 17.6 | 17.1 | 17.4 | 33.5 | 32.4 | 32.9 | 56.2 | 53.1 | 54.6 |
| 16820 | 7.4 | 7.1 | 7.2 | 10.9 | 10.7 | 10.8 | 10.6 | 10.8 | 10.7 | 17.1 | 17.3 | 17.2 | 31.4 | 31.9 | 31.7 | 51.6 | 51.2 | 51.4 |
| 16822 | 6.6 | 6.2 | 6.4 | 11.2 | 10.7 | 10.9 | 11.4 | 10.6 | 11.0 | 18.4 | 16.7 | 17.6 | 33.1 | 32.0 | 32.6 | 55.8 | 53.7 | 54.7 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

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TABLE D40 (PAGE 5): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS - PART C

DOSAGE GROUP V 30.0 MG/KG/DAY

| RAT/ LITTER NUMBER | DAY 1 | | | DAY 5a | | | DAY 5b | | | DAY 8 | | | DAY 14 | | | DAY 22 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 16823 | 6.5 | 6.2 | 6.3 | 8.1 | 8.0 | 8.0 | 8.1 | 7.9 | 8.0 | 13.6 | 13.5 | 13.6 | 26.9 | 26.5 | 26.7 | 45.4 | 46.3 | 45.8 |
| 16825 | 6.3 | 5.8 | 6.1 | 9.5 | 9.0 | 9.3 | 9.7 | 8.9 | 9.3 | 16.0 | 15.1 | 15.5 | 30.0 | 29.3 | 29.7 | 172.6 | 48.6 | 110.6 |
| 16826 | 6.5 | 5.9 | 6.3 | 10.2 | 9.6 | 9.9 | 10.0 | 10.1 | 10.0 | 17.0 | 16.8 | 16.9 | 35.2 | 34.4 | 34.8 | 54.8 | 55.0 | 54.9 |
| 16827 | 7.0 | 6.5 | 6.8 | 10.5 | 9.9 | 10.2 | 10.2 | 10.1 | 10.2 | 16.1 | 15.8 | 15.9 | 29.8 | 29.5 | 29.6 | 53.5 | 50.4 | 51.9 |
| 16828 | 7.4 | 6.9 | 7.1 | 11.2 | 10.6 | 10.8 | 11.3 | 10.8 | 11.0 | 18.7 | 17.8 | 18.3 | 34.2 | 33.0 | 33.6 | 61.1 | 57.6 | 59.3 |
| 16830 | 6.9 | 6.4 | 6.6 | 10.6 | 10.0 | 10.2 | 10.5 | 9.7 | 10.1 | 17.8 | 16.4 | 17.1 | 33.5 | 32.5 | 33.0 | 56.8 | 54.0 | 55.4 |
| 16831 | 6.5 | 6.4 | 6.4 | 9.7 | 9.2 | 9.4 | 9.8 | 9.7 | 9.8 | 16.8 | 16.5 | 16.7 | 31.6 | 31.4 | 31.5 | 49.9 | 52.7 | 51.3 |
| 16833 | 6.2 | 6.0 | 6.1 | 8.4 | 8.1 | 8.2 | 8.4 | 8.4 | 8.4 | 13.9 | 14.1 | 14.0 | 27.3 | 27.0 | 27.1 | 49.6 | 49.0 | 49.3 |
| 16834 | 6.2 | 5.8 | 6.0 | 8.8 | 8.2 | 8.5 | 8.8 | 8.5 | 8.7 | 15.0 | 14.6 | 14.8 | 29.6 | 28.4 | 29.0 | 52.0 | 49.1 | 50.6 |
| 16836 | 6.7 | 6.4 | 6.6 | 11.4 | 10.6 | 11.0 | 11.1 | 11.1 | 11.1 | 19.2 | 18.5 | 18.8 | 36.0 | 35.2 | 35.6 | 58.0 | 57.3 | 57.6 |
| 16837 | 6.1 | 5.7 | 5.9 | 9.0 | 7.6 | 8.3 | 9.4 | 8.2 | 8.8 | 15.7 | 13.4 | 14.6 | 30.7 | 27.2 | 28.9 | 53.9 | 48.7 | 51.3 |
| 16839 | 6.9 | 6.8 | 6.9 | 9.9 | 10.0 | 9.9 | 9.3 | 9.9 | 9.6 | 12.2 | 12.8 | 12.5 | 24.5 | 23.4 | 24.0 | 42.6 | 42.5 | 42.6 |
| 16840 | 7.8 | 7.3 | 7.6 | 12.5 | 12.0 | 12.3 | 12.6 | 11.8 | 12.2 | 20.2 | 18.5 | 19.3 | 37.2 | 35.1 | 36.2 | 69.2 | 61.5 | 65.3 |
| 16842 | 7.0 | 6.6 | 6.8 | 11.5 | 11.0 | 11.3 | 11.3 | 11.0 | 11.2 | 19.8 | 19.0 | 19.4 | 37.4 | 36.0 | 36.7 | 63.4 | 60.1 | 61.7 |
| 16843 | 6.3 | 6.0 | 6.1 | 10.0 | 9.3 | 9.5 | 9.9 | 10.0 | 9.9 | 15.9 | 16.4 | 16.2 | 32.1 | 33.0 | 32.6 | 52.9 | 53.3 | 53.1 |
| 16844 | 6.9 | 6.4 | 6.7 | 10.3 | 9.7 | 10.0 | 10.2 | 10.4 | 10.3 | 17.0 | 17.6 | 17.3 | 33.5 | 34.3 | 33.9 | 58.5 | 58.6 | 58.6 |

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM
ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
a. Preculling
b. Postculling

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 1): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 1 | | | | | | | |
| 16731 | 6.9 | 6.8 | 6.9 | 7.2 | 6.9 | 6.5 | 6.7 | 6.0 | 6.7 | 6.4 | 6.0 | 6.7 | | | | | | | | |
| 16732 | 6.2 | 6.5 | 5.8 | 5.8 | 5.4 | 4.6 | 5.5 | 6.7 | 5.8 | 6.8 | 6.2 | 5.9 | 6.4 | 6.4 | 6.9 | 6.4 | 5.7 | 6.0 | | |
| 16734 | 7.7 | 7.5 | 7.4 | 7.9 | 7.6 | 8.4 | 7.8 | 7.8 | 6.8 | 7.3 | 7.3 | 7.6 | 7.3 | 7.4 | | | | | | |
| 16735 | 5.8 | 6.1 | 6.1 | 5.4 | 6.3 | 6.2 | 5.8 | 5.7 | 6.1 | 5.2 | 5.9 | 5.9 | 6.0 | 5.2 | 5.9 | | | | | |
| 16736 | 6.9 | 6.4 | 6.4 | 6.5 | 6.1 | 6.6 | 6.7 | 6.3 | 6.3 | 5.8 | 5.7 | 5.8 | 7.0 | 6.0 | | | | | | |
| 16737 | 6.6 | 6.5 | 7.1 | 6.5 | 7.0 | 7.0 | 6.5 | 5.8 | 6.2 | 5.6 | 6.0 | 6.6 | 5.8 | 6.5 | 4.9 | 6.2 | | | | |
| 16738 | 6.6 | 6.2 | 6.2 | 6.4 | 6.0 | 6.2 | 6.0 | 6.6 | 6.4 | 6.2 | 6.2 | 6.0 | 5.5 | 5.5 | | | | | | |
| 16740 | 6.8 | 6.0 | 5.1 | 6.7 | MS | 6.3 | 5.6 | 6.2 | 5.2 | 5.9 | 6.2 | 5.7 | 5.2 | 5.9 | 5.6 | 6.3 | 5.4 | | | |
| 16741 | 7.1 | 7.1 | 7.1 | 6.9 | 6.6 | 6.7 | 6.7 | 6.6 | 6.6 | 6.8 | 6.9 | 6.5 | 6.4 | 6.3 | 6.8 | | | | | |
| 16742 | 6.2 | 7.1 | 6.7 | 6.2 | 5.9 | 6.2 | 6.1 | 6.5 | 6.0 | 7.0 | 6.5 | 6.1 | 5.8 | 5.7 | 4.8 | FS | | | | |
| 16745 | 6.4 | 6.4 | 6.0 | 6.0 | 6.7 | 6.4 | 6.5 | 6.5 | 6.2 | 6.0 | 5.9 | 5.5 | 6.1 | 6.0 | 5.9 | 5.8 | | | | |
| 16746 | 5.4 | 5.9 | 6.2 | 5.4 | 5.9 | 5.8 | 5.9 | 5.7 | 5.9 | 5.6 | 5.9 | 5.5 | 5.8 | 5.6 | 5.5 | | | | | |
| 16747 | 6.2 | 7.0 | 5.8 | 6.3 | 6.4 | 5.4 | 6.5 | 6.2 | 5.8 | 6.3 | 6.0 | 6.5 | 5.8 | 6.0 | 6.4 | | | | | |
| 16749 | 6.4 | 6.5 | 5.6 | 6.0 | 5.6 | 6.8 | 5.5 | 6.5 | 6.3 | 5.9 | 5.7 | 5.7 | 5.7 | 6.0 | 5.6 | 5.5 | | | | |
| 16750 | 6.6 | 6.5 | 7.0 | 6.1 | 6.5 | 7.2 | 6.1 | 6.6 | 6.4 | 6.0 | 6.3 | 6.4 | 6.5 | 6.6 | 6.8 | 6.0 | | | | |
| 16753 | 6.2 | 6.2 | 6.0 | 5.7 | 6.5 | 6.1 | 6.9 | 6.1 | 6.7 | 6.6 | 5.9 | 6.4 | 6.4 | 6.1 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 2): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1<br>21 | 2<br>22 | 3<br>23 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | LACTATION DAY 1 | | | | | | | |
| 16755 | 7.1 | 5.9 | 6.6 | 7.2 | 6.2 | 6.8 | 6.0 | 6.2 | 6.9 | 6.8 | 6.5 | 6.2 | 6.3 | 5.8 | 6.1 | 5.6 | 6.0 | | | |
| 16758 | 7.2 | 7.0 | 6.4 | 7.0 | 6.9 | 6.8 | 6.5 | 5.7 | 6.6 | 6.4 | 6.4 | 6.4 | 6.8 | 6.2 | | | | | | |
| 16760 | 7.4 | 7.1 | 6.8 | 7.5 | 6.7 | 6.7 | 7.7 | 7.3 | 7.2 | 7.3 | 6.0 | 6.3 | 6.8 | 6.2 | | | | | | |
| 16761 | 6.7 | 6.4 | 6.2 | 6.5 | 6.3 | 6.6 | 6.2 | 5.9 | 5.9 | 6.1 | 5.6 | 6.1 | | | | | | | | |
| 16762 | 5.7 | 6.1 | 6.2 | 6.3 | 6.2 | 5.8 | 6.0 | 5.6 | 5.8 | 5.8 | 5.5 | 5.7 | 5.7 | 5.7 | | | | | | |
| 16763 | 6.8 | 6.6 | 6.6 | 7.0 | 7.0 | 6.5 | 6.4 | 7.3 | MS | 6.4 | 6.6 | 6.2 | 6.5 | 6.9 | 6.2 | | | | | |
| 16764 | 6.4 | 6.4 | 6.2 | 6.4 | 6.2 | 6.1 | 6.0 | 6.1 | 6.2 | 6.3 | 5.7 | 5.7 | 6.2 | 6.4 | | | | | | |
| 16765 | 6.4 | 7.0 | 6.9 | 6.3 | 6.8 | 6.3 | 6.9 | MS | 6.4 | 6.2 | 6.3 | 5.7 | 6.1 | 6.0 | | | | | | |
| 16767 | 5.9 | 7.0 | 6.3 | 6.7 | 5.1 | 6.1 | 6.9 | 6.8 | 7.2 | 6.0 | 6.6 | 6.4 | 5.5 | 6.3 | 6.7 | | | | | |
| 16768 | 7.3 | 7.7 | 6.5 | 7.0 | 7.1 | 7.4 | 7.0 | 7.6 | 7.0 | 7.0 | 6.6 | 6.8 | 6.5 | 5.7 | 6.8 | 6.6 | | | | |
| 16769 | 6.8 | 5.8 | 6.9 | 6.1 | 6.8 | 6.7 | 6.4 | 6.3 | 5.9 | 6.4 | 6.4 | 6.4 | 6.0 | 5.9 | 6.3 | 6.0 | | | | |
| 16770 | 6.7 | 6.7 | 6.9 | 7.3 | 6.9 | 6.1 | 7.0 | 6.3 | 6.1 | 6.7 | 6.2 | 6.8 | 5.9 | 7.0 | 6.3 | | | | | |
| 16771 | 6.7 | 6.4 | 6.5 | 6.6 | 6.3 | 6.6 | 6.4 | 5.1 | 6.5 | 5.9 | 6.2 | 6.6 | 6.8 | 6.0 | | | | | | |
| 16773 | 6.1 | 7.0 | 6.7 | 6.6 | 6.7 | 6.7 | 5.8 | 6.6 | 6.1 | 5.7 | 7.2 | 6.4 | 6.3 | 6.8 | 6.2 | | | | | |
| 16774 | 7.0 | 7.0 | 6.5 | 7.0 | 6.9 | 7.0 | 6.7 | 6.9 | 7.4 | 6.6 | 6.8 | 6.7 | 5.7 | | | | | | | |
| 16776 | 6.0 | 5.5 | 6.6 | 6.5 | 7.0 | 6.2 | 6.8 | 6.3 | 6.8 | 6.7 | 6.2 | 6.7 | 6.5 | 6.2 | 6.6 | 6.1 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 3): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1<br>21 | 2<br>22 | 3<br>23 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | LACTATION DAY 1 | | | | | | | |
| 16781 | 6.0 | 6.4 | 6.9 | 6.0 | 6.6 | 4.0 | 6.2 | 6.1 | 5.9 | 6.6 | 6.2 | 5.9 | 6.1 | 5.9 | | | | | | |
| 16782 | 5.4 | 6.3 | 5.9 | 6.0 | 5.6 | 5.8 | 6.3 | 6.2 | 6.3 | 5.9 | 6.2 | 5.6 | 5.3 | 5.6 | 5.8 | 5.7 | 5.9 | | | |
| 16783 | 6.8 | 6.9 | 6.5 | 6.3 | 6.4 | 6.0 | 7.1 | 5.7 | 5.6 | 5.9 | 6.2 | 6.3 | 6.1 | 5.5 | 6.6 | 5.9 | 6.0 | | | |
| 16784 | 7.0 | 7.3 | 6.5 | 6.1 | 7.6 | 6.7 | 7.7 | 6.7 | 5.9 | 6.7 | 6.5 | 6.6 | | | | | | | | |
| 16786 | 6.2 | 6.1 | 5.8 | 6.0 | 6.1 | 5.6 | 5.3 | 5.7 | 5.3 | 5.7 | 5.7 | 5.8 | 6.1 | 4.7 | | | | | | |
| 16787 | 7.1 | 6.1 | 5.8 | 6.3 | 6.1 | 6.0 | 6.3 | 5.7 | 5.9 | 6.1 | 5.7 | 6.1 | 5.7 | 5.6 | 6.0 | 5.7 | | | | |
| 16791 | 7.1 | 7.1 | 8.1 | 7.0 | 7.4 | 5.9 | 6.7 | 6.9 | 6.3 | 6.7 | 6.5 | | | | | | | | | |
| 16792 | 6.2 | 5.5 | 5.5 | 4.7 | 5.1 | 5.9 | 5.8 | 5.3 | 5.9 | 5.3 | 5.2 | 5.2 | 5.2 | | | | | | | |
| 16793 | 6.8 | 7.0 | 7.1 | 6.8 | 6.4 | 6.8 | 6.7 | 6.8 | 6.5 | 6.4 | 6.1 | | | | | | | | | |
| 16794 | 6.2 | 6.3 | 6.1 | 6.6 | 6.4 | 6.6 | 6.3 | 6.0 | 5.6 | 6.2 | 5.5 | 6.0 | 5.9 | 5.4 | 6.2 | 5.0 | | | | |
| 16795 | 5.9 | 6.5 | 6.1 | 6.1 | 6.3 | 6.0 | 6.4 | 5.4 | 5.8 | 5.6 | 5.5 | 5.6 | 6.4 | 5.8 | 6.2 | 6.2 | 6.4 | FD 1 | | |
| 16796 | 5.8 | 5.7 | 6.0 | 5.5 | 5.5 | 5.9 | 5.9 | 5.9 | 5.6 | 5.1 | 6.1 | | | | | | | | | |
| 16797 | 6.8 | 6.5 | 7.3 | 6.7 | 7.0 | 7.2 | 6.8 | 6.7 | 6.9 | 6.5 | 7.0 | 6.6 | 6.3 | 6.7 | 6.6 | 6.5 | | | | |
| 16798 | 7.2 | 7.3 | 7.3 | 7.8 | 7.4 | 7.3 | 8.2 | 7.8 | 6.9 | 6.7 | 6.3 | 7.0 | 6.6 | 6.5 | 6.7 | | | | | |
| 16799 | 6.0 | 6.6 | 6.5 | 6.2 | 6.6 | 6.7 | 6.3 | 6.0 | 6.5 | 6.0 | 6.5 | 5.8 | 5.8 | 5.9 | 5.6 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 4): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1<br>21 | 2<br>22 | 3<br>23 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 1 | | | | | | |
| 16800 | 6.0 | 6.5 | 5.9 | 6.7 | 6.5 | 6.3 | 6.9 | 6.6 | 6.1 | 6.1 | 5.6 | 5.6 | 5.5 | | | | | | | |
| 16801 | 5.5 | 5.9 | 5.1 | 5.4 | 5.7 | 5.2 | 5.2 | 5.0 | 5.3 | 5.4 | 5.2 | 5.5 | 5.5 | 5.1 | 5.3 | 5.3 | 4.9 | 5.3 | | |
| 16802 | 6.8 | 7.0 | 6.8 | 6.4 | 6.4 | 6.8 | 5.8 | 6.8 | 6.6 | 6.2 | 5.9 | 5.9 | 5.7 | 5.8 | 6.4 | | | | | |
| 16803 | 6.3 | 6.7 | 6.9 | 6.9 | 6.2 | 5.8 | 5.6 | 5.9 | 6.1 | 5.0 | 6.1 | 6.3 | 5.7 | 6.7 | 6.1 | 6.4 | | | | |
| 16805 | 6.7 | 6.5 | 6.0 | 6.1 | 6.6 | 6.7 | 6.6 | 6.5 | 6.7 | MS | 5.8 | 6.7 | 6.3 | 6.4 | 6.0 | UU | | | | |
| 16806 | 6.6 | 6.5 | 7.0 | 6.6 | 6.9 | 6.9 | 6.4 | 6.5 | 6.0 | 6.1 | 3.7 | 5.7 | 6.8 | 6.1 | 6.5 | | | | | |
| 16807 | 6.6 | 6.1 | 6.4 | 6.3 | 6.6 | 6.2 | 6.0 | 6.1 | 6.2 | 6.1 | 5.9 | 6.1 | 6.5 | 6.0 | 6.4 | 6.0 | | | | |
| 16808 | 6.9 | 6.3 | 6.8 | 6.6 | 6.7 | 6.3 | 5.9 | 6.3 | 6.3 | 5.8 | 5.9 | 6.0 | 6.0 | | | | | | | |
| 16810 | 6.7 | 7.3 | 6.9 | 6.7 | 7.0 | 6.9 | 6.4 | 6.6 | 6.2 | 6.5 | 6.0 | 6.4 | 6.3 | 6.1 | FS | | | | | |
| 16811 | 6.1 | 6.6 | 5.8 | 6.3 | 6.6 | 6.4 | 5.8 | 6.3 | 6.3 | 6.5 | 6.3 | 6.3 | 6.0 | 5.4 | 6.1 | | | | | |
| 16814 | 6.1 | 6.4 | 6.8 | 6.6 | 6.5 | 6.3 | 6.4 | 6.2 | 5.8 | 6.2 | 6.0 | 5.5 | 6.2 | 6.3 | | | | | | |
| 16815 | 7.2 | 6.2 | 7.0 | 6.6 | 6.5 | 6.4 | 6.8 | 6.4 | 6.3 | 6.7 | 6.5 | 6.6 | 6.5 | 6.1 | 6.5 | | | | | |
| 16817 | 7.2 | 5.6 | 7.0 | 4.1 | 7.1 | 6.8 | 6.6 | 6.5 | 7.4 | 7.4 | 6.5 | 6.5 | 4.2 | 6.5 | 4.7 | 6.8 | 6.4 | | | |
| 16818 | 6.5 | 6.3 | 6.7 | 6.4 | 6.4 | 6.2 | 6.2 | 6.2 | 6.3 | 6.0 | 6.3 | 5.8 | 6.0 | 6.0 | 6.1 | | | | | |
| 16820 | 7.3 | 7.5 | 7.0 | 7.9 | 7.7 | 7.3 | 7.0 | 7.7 | 6.8 | 7.0 | 6.7 | 7.0 | 7.4 | FS | | | | | | |
| 16822 | 6.9 | 6.1 | 7.0 | 6.0 | 7.1 | 6.6 | 6.6 | 6.0 | 6.6 | 5.1 | 6.3 | 6.3 | 6.4 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

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TABLE D41 (PAGE 5): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | LACTATION DAY 1 | | | | | | | |
| 16823 | 6.9 | 6.4 | 6.2 | 6.1 | 6.4 | 7.0 | 5.9 | 6.5 | 6.4 | 6.4 | 5.9 | 6.1 | 6.1 | 6.2 | | | | | | |
| 16825 | 6.2 | 6.2 | 6.0 | 6.2 | 6.0 | 7.0 | 6.4 | 6.6 | 6.3 | 5.7 | 6.1 | 5.6 | 5.9 | 5.6 | 6.0 | | | | | |
| 16826 | 5.8 | 6.6 | 6.4 | 6.6 | 5.4 | 6.5 | 6.5 | 7.1 | 6.6 | 7.0 | 7.0 | 6.2 | 6.2 | 5.7 | 4.8 | 6.6 | 5.8 | FD 1 | | |
| 16827 | 7.1 | 7.2 | 6.8 | 7.1 | 7.1 | 6.8 | 7.3 | 6.9 | 6.3 | 6.6 | 6.9 | 6.2 | 6.5 | 6.9 | 6.2 | | | | | |
| 16828 | 6.7 | 7.3 | 7.5 | 7.9 | 7.1 | 7.6 | 7.1 | 6.3 | 7.3 | 7.1 | 7.2 | 6.5 | 7.1 | 6.9 | 6.7 | 6.9 | | | | |
| 16830 | 6.5 | 7.1 | 6.8 | 7.0 | 6.8 | 7.1 | 6.9 | 6.8 | 5.9 | 6.3 | 6.6 | 6.2 | 6.3 | 6.2 | | | | | | |
| 16831 | 6.7 | 6.1 | 6.4 | 6.3 | 6.9 | MD 1 | 6.7 | 6.3 | 6.5 | 6.4 | 6.6 | 6.5 | 6.6 | 6.5 | 5.5 | 6.3 | 6.2 | | | |
| 16833 | 5.8 | 5.2 | 6.5 | 6.3 | 6.4 | 6.3 | 6.4 | 6.2 | 6.7 | 6.0 | 6.3 | 6.1 | 6.0 | 6.5 | 6.1 | 5.7 | 5.6 | | | |
| 16834 | 6.6 | 6.1 | 6.7 | 6.3 | 5.1 | 6.0 | 6.1 | 6.2 | 6.3 | 6.2 | 5.7 | 5.6 | 5.8 | 6.1 | 6.0 | 5.5 | 5.7 | | | |
| 16836 | 7.2 | 6.3 | 6.1 | 7.2 | 6.9 | 6.6 | 6.6 | MS | MS | 6.4 | 6.7 | 6.1 | 6.7 | 6.5 | 6.6 | 6.1 | FS | | | |
| 16837 | 6.3 | 6.4 | 6.4 | 5.9 | 6.3 | 6.0 | 4.3 | 6.4 | 6.5 | 6.2 | 5.2 | 5.9 | 5.6 | 6.2 | 6.0 | 5.8 | 6.1 | 4.5 | 5.8 | 5.9 |
| 16839 | 6.9 | 7.2 | 7.0 | 7.0 | 6.6 | 7.4 | 7.4 | 6.0 | 6.6 | 6.8 | 6.7 | 7.0 | 6.8 | | | | | | | |
| 16840 | 7.9 | 7.8 | 8.1 | 8.0 | 7.4 | 7.5 | 8.1 | 8.0 | 8.0 | 6.2 | 7.5 | 7.4 | 7.4 | | | | | | | |
| 16842 | 7.1 | 6.7 | 7.0 | 7.2 | 6.7 | 6.8 | 7.4 | 6.7 | 6.9 | 6.7 | 6.6 | 6.7 | 6.6 | 6.2 | | | | | | |
| 16843 | 6.0 | 7.0 | 6.4 | 6.1 | 6.2 | 6.1 | 5.9 | 5.6 | 6.2 | 6.1 | 6.4 | 6.2 | 6.0 | 6.0 | 5.9 | | | | | |
| 16844 | 6.6 | 6.5 | 7.1 | 6.7 | 7.6 | 7.0 | 7.0 | 6.9 | 6.8 | 6.7 | 6.6 | 6.4 | 6.7 | 6.0 | 6.3 | 6.0 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 6): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 5 PRECULLING | | | | | | | |
| 16731 | 9.0 | 10.6 | 10.1 | 10.0 | 9.2 | 10.3 | 9.8 | 9.8 | 9.8 | 9.5 | 9.8 | 9.9 | | | | | | | | |
| 16732 | 9.5 | 10.2 | 8.4 | 8.4 | 9.4 | 8.8 | 9.9 | 10.0 | 9.5 | 10.2 | 9.9 | 10.2 | 9.5 | 8.7 | 9.6 | 9.4 | 4.6 | 6.3 | | |
| 16734 | 12.5 | 10.7 | 11.1 | 10.7 | 11.6 | 11.0 | 11.2 | 12.2 | 8.8 | 10.8 | 11.1 | 11.3 | 10.7 | 10.6 | | | | | | |
| 16735 | 9.3 | 9.6 | 8.8 | 9.2 | 9.6 | 9.0 | 9.1 | 9.0 | 8.7 | 9.1 | 8.7 | 8.3 | 8.0 | 9.5 | 7.3 | | | | | |
| 16736 | 8.7 | 8.4 | 8.7 | 8.3 | 8.4 | 9.1 | 8.4 | 9.6 | 9.4 | 8.2 | 6.9 | 9.3 | 8.1 | 7.9 | | | | | | |
| 16737 | 8.8 | 7.8 | 9.5 | 8.3 | 9.8 | 9.9 | 8.6 | 7.4 | 7.7 | 7.6 | 7.7 | 8.4 | 8.2 | 8.0 | 9.0 | FD 2 | | | | |
| 16738 | 10.5 | 10.2 | 9.8 | 9.9 | 9.7 | 9.9 | 10.1 | 10.5 | 10.1 | 10.5 | 9.2 | 9.9 | 9.7 | FD 2 | | | | | | |
| 16740 | 7.4 | 7.7 | 6.8 | 8.0 | MS | 7.2 | 8.4 | 6.9 | 7.9 | 7.7 | 7.6 | 8.0 | 8.0 | 6.9 | 6.5 | 7.0 | 7.9 | | | |
| 16741 | 10.0 | 8.5 | 9.0 | 9.7 | 9.1 | 9.1 | 8.8 | 8.4 | 9.0 | 8.9 | 8.6 | 7.9 | 8.1 | 8.7 | 9.0 | | | | | |
| 16742 | 9.3 | 8.8 | 9.5 | 9.0 | 9.7 | 9.9 | 9.7 | 9.0 | 10.1 | 9.5 | 9.0 | 9.1 | 9.3 | 8.5 | 7.3 | FS | | | | |
| 16745 | 9.3 | 9.1 | 8.9 | 8.7 | 10.4 | 9.3 | 9.3 | 8.7 | 9.5 | 8.4 | 9.1 | 9.1 | 8.7 | 9.4 | 8.2 | 8.5 | | | | |
| 16746 | 7.8 | 7.8 | 7.8 | 8.7 | 7.5 | 7.9 | 8.5 | 8.1 | 7.4 | 7.9 | 8.3 | 7.7 | 8.0 | 7.7 | 7.4 | | | | | |
| 16747 | 9.6 | 9.5 | 9.7 | 8.3 | 9.0 | 9.1 | 9.3 | 9.0 | 9.7 | 9.1 | 8.5 | 8.6 | 9.0 | 7.9 | 9.4 | | | | | |
| 16749 | 8.4 | 8.3 | 10.1 | 9.8 | 9.1 | 10.6 | 7.8 | 8.8 | 8.0 | 9.4 | 8.6 | 8.7 | 8.6 | 8.1 | 9.6 | 8.3 | | | | |
| 16750 | 10.2 | 9.9 | 10.4 | 9.4 | 7.7 | 10.7 | 9.8 | 9.7 | 10.2 | 10.0 | 9.8 | 10.3 | 9.1 | 9.8 | 10.2 | 9.6 | | | | |
| 16753 | 9.4 | 7.5 | 8.7 | 8.6 | 8.0 | 9.4 | 7.6 | 8.9 | 9.0 | 8.3 | 8.8 | 7.9 | 9.0 | 8.6 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 7): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | LACTATION DAY 5 PRECULLING | | | | | | | |
| 16755 | 9.9 | 9.9 | 8.5 | 9.1 | 8.3 | 9.6 | 9.1 | 8.1 | 8.5 | 9.2 | 9.4 | 9.2 | 8.2 | 8.7 | 9.7 | 8.7 | 7.4 | | | |
| 16758 | 9.5 | 9.4 | 10.4 | 10.5 | 10.3 | 10.2 | 8.7 | 9.3 | 9.9 | 9.7 | 9.5 | 9.0 | 7.7 | 8.9 | | | | | | |
| 16760 | 10.8 | 8.8 | 11.4 | 10.8 | 10.4 | 10.1 | 10.8 | 11.6 | 9.3 | 10.8 | 9.0 | 9.0 | 10.1 | 8.8 | | | | | | |
| 16761 | 9.6 | 10.4 | 10.7 | 10.1 | 9.4 | 9.7 | 9.8 | 9.5 | 9.3 | 8.4 | 8.8 | 9.7 | | | | | | | | |
| 16762 | 9.3 | 9.9 | 9.2 | 9.7 | 9.1 | 9.7 | 9.8 | 9.7 | 9.0 | 9.5 | 9.5 | 8.9 | 9.0 | 9.3 | | | | | | |
| 16763 | 10.4 | 9.9 | 11.3 | 10.9 | 9.9 | 10.3 | 11.3 | 10.6 | MS | 11.2 | 10.5 | 9.8 | 10.3 | 9.8 | 9.7 | | | | | |
| 16764 | 9.8 | 9.6 | 10.0 | 9.4 | 9.9 | 9.2 | 9.7 | 8.8 | 9.8 | 9.5 | 9.7 | 8.8 | 9.9 | 9.7 | | | | | | |
| 16765 | 10.3 | 10.4 | 10.3 | 9.9 | 9.9 | 10.1 | 10.0 | MS | 9.9 | 9.9 | 9.8 | 9.9 | 9.7 | 9.0 | | | | | | |
| 16767 | 10.8 | 10.7 | 9.5 | 10.1 | 9.2 | 11.1 | 9.3 | 7.1 | 10.7 | 8.4 | 9.9 | 10.2 | 9.1 | 10.7 | 9.3 | | | | | |
| 16768 | 10.1 | 10.1 | 11.7 | 10.1 | 9.2 | 9.9 | 9.1 | 9.2 | 9.5 | 8.5 | 8.6 | 8.8 | 9.2 | 9.3 | 9.1 | 7.2 | | | | |
| 16769 | 9.2 | 8.9 | 9.2 | 10.3 | 9.0 | 10.5 | 8.3 | 9.6 | 7.7 | 10.1 | 9.6 | 9.4 | 9.0 | 8.9 | 9.1 | 9.7 | | | | |
| 16770 | 10.9 | 11.5 | 12.4 | 11.6 | 11.4 | 11.1 | 11.5 | 10.1 | 10.9 | 11.6 | 10.3 | 11.8 | 9.6 | 11.2 | 11.1 | | | | | |
| 16771 | 10.3 | 10.4 | 9.8 | 9.6 | 10.2 | 10.9 | 9.6 | 9.6 | 9.3 | 10.0 | 9.9 | 7.8 | 9.8 | 9.5 | | | | | | |
| 16773 | 8.8 | 8.6 | 10.5 | 10.0 | 9.5 | 9.4 | 9.9 | 10.2 | 9.5 | 8.5 | 8.2 | 8.7 | 9.9 | 10.4 | 8.3 | | | | | |
| 16774 | 10.1 | 10.1 | 9.6 | 9.8 | 9.8 | 9.8 | 9.8 | 10.2 | 10.8 | 9.4 | 9.5 | 8.6 | 9.9 | | | | | | | |
| 16776 | 8.8 | 9.0 | 8.7 | 9.6 | 8.0 | 10.0 | 9.2 | 9.5 | 8.4 | MD 2 | 9.3 | 9.3 | 8.7 | 9.5 | 9.1 | 8.5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 8): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | LACTATION DAY 5 PRECULLING | | | | | | | |
| 16781 | 9.2 | 9.3 | 5.5 | 8.6 | 9.5 | 9.0 | 9.4 | 9.0 | 8.4 | 8.9 | 9.0 | 9.2 | 6.7 | 8.6 | | | | | | |
| 16782 | 10.3 | 8.8 | 9.0 | 9.8 | 10.2 | 10.3 | 10.9 | 10.7 | 10.3 | 9.2 | 9.5 | 10.8 | 10.2 | 9.0 | 9.9 | 9.9 | 9.4 | | | |
| 16783 | 9.8 | 10.6 | 9.5 | 8.7 | 9.5 | 9.8 | 8.3 | 8.1 | 8.5 | 9.1 | 8.3 | 9.0 | 8.9 | 8.5 | 7.6 | 8.4 | 8.4 | | | |
| 16784 | 10.1 | 11.4 | 11.8 | 8.4 | 10.8 | 10.1 | 9.9 | 11.3 | 10.0 | 10.6 | 10.5 | 8.9 | | | | | | | | |
| 16786 | 10.2 | 9.0 | 10.3 | 9.3 | 9.5 | 9.3 | 9.8 | 10.1 | 9.7 | 10.7 | 9.5 | 10.4 | 8.1 | 9.5 | | | | | | |
| 16787 | 7.4 | 8.4 | 8.4 | 8.9 | 9.5 | 8.1 | 8.7 | 8.6 | 8.1 | 8.7 | 8.9 | 8.2 | 8.3 | 8.2 | 8.4 | 8.3 | | | | |
| 16791 | 9.5 | 11.3 | 11.3 | 11.5 | 12.5 | 11.5 | 10.9 | 10.7 | 11.0 | 10.4 | 11.0 | | | | | | | | | |
| 16792 | 8.9 | 8.1 | 8.7 | 8.8 | 9.6 | 7.1 | 8.6 | 8.4 | 8.6 | 8.2 | 9.6 | 9.3 | 8.7 | | | | | | | |
| 16793 | 10.9 | 10.8 | 11.1 | 10.8 | 10.6 | 10.7 | 10.2 | 9.5 | 10.7 | 10.6 | 9.4 | | | | | | | | | |
| 16794 | 9.4 | 9.1 | 9.5 | 9.0 | 9.1 | 9.5 | 8.8 | 9.0 | 8.3 | 8.4 | 7.5 | 9.0 | 8.6 | 8.0 | 8.8 | 9.7 | | | | |
| 16795 | 8.7 | 9.1 | 8.4 | 8.5 | 9.0 | 5.8 | 8.9 | 8.7 | 9.3 | 8.7 | 8.8 | 9.1 | 9.1 | 8.2 | 8.8 | 8.7 | 7.9 | FD 1 | | |
| 16796 | 8.8 | 9.6 | 8.5 | 9.1 | 9.3 | 9.7 | 9.5 | 8.9 | 8.9 | 7.2 | 9.7 | | | | | | | | | |
| 16797 | 9.6 | 9.4 | 9.4 | 9.7 | 9.9 | 9.1 | 8.0 | 9.7 | 8.3 | 9.5 | 9.1 | 7.6 | 8.6 | 7.8 | 8.5 | 9.0 | | | | |
| 16798 | 11.1 | 10.2 | 10.8 | 8.3 | 9.9 | 7.0 | 9.8 | 10.4 | 8.2 | 8.4 | 9.8 | 9.3 | 9.9 | 9.1 | FM 3 | | | | | |
| 16799 | 10.1 | 10.3 | 10.2 | 9.8 | 10.0 | 9.1 | 8.6 | 10.1 | 8.7 | 8.8 | 9.2 | 9.3 | 8.5 | 9.4 | 9.8 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 9): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 5 PRECULLING | | | | | | |
| 16800 | 7.8 | 9.0 | 9.7 | 9.3 | 7.0 | 8.9 | 8.9 | 8.3 | 9.2 | 8.9 | 8.3 | 8.1 | 8.8 | | | | | | | |
| 16801 | 8.2 | 9.7 | 9.4 | 8.7 | 7.8 | 8.9 | 8.5 | 8.6 | 9.8 | 8.4 | 9.1 | 8.6 | 8.6 | 8.4 | 8.0 | 7.5 | 8.9 | 6.0 | | |
| 16802 | 10.0 | 9.8 | 9.9 | 10.2 | 10.4 | 9.1 | 9.3 | 8.8 | 10.2 | 9.7 | 9.6 | 9.4 | 10.2 | 8.7 | FD 3 | | | | | |
| 16803 | 11.0 | 11.2 | 9.8 | 11.3 | 9.1 | 9.9 | 11.0 | 9.4 | 9.3 | 10.7 | 10.3 | 10.4 | 9.5 | 10.2 | 9.4 | 9.6 | | | | |
| 16805 | 10.8 | 11.0 | 11.4 | 11.1 | 10.4 | 11.4 | 11.1 | 10.6 | 10.8 | MS | 9.9 | 10.9 | 10.9 | 10.6 | 11.0 | UU | | | | |
| 16806 | 9.6 | 9.7 | 9.7 | 10.0 | 9.9 | 9.3 | 9.8 | FM 2 | 9.5 | 9.6 | 10.3 | 9.6 | 9.7 | 9.5 | 7.9 | | | | | |
| 16807 | 9.0 | 10.0 | 9.8 | 8.5 | 9.5 | 9.2 | 9.5 | 9.3 | 10.1 | 9.2 | 9.2 | 8.5 | 8.8 | 8.8 | 9.9 | 8.8 | | | | |
| 16808 | 10.1 | 11.0 | 9.9 | 9.2 | 9.5 | 10.6 | 9.0 | 10.4 | 9.2 | 9.3 | 9.6 | 9.7 | 8.8 | | | | | | | |
| 16810 | 10.4 | 10.0 | 9.7 | 10.0 | 10.0 | 9.8 | 10.0 | 9.2 | 9.5 | 9.5 | 8.9 | 10.0 | 10.7 | FD 4 | FS | | | | | |
| 16811 | 9.3 | 8.1 | 9.0 | 9.2 | 8.6 | 8.3 | 9.2 | 10.2 | 9.5 | 8.5 | 8.4 | 7.1 | 9.7 | 8.7 | 9.2 | | | | | |
| 16814 | 9.8 | 11.3 | 10.2 | 11.8 | 10.9 | 10.4 | 10.4 | 10.1 | 9.8 | 10.5 | 10.0 | 10.2 | 10.7 | 11.0 | | | | | | |
| 16815 | 11.0 | 10.3 | 11.4 | 10.4 | 10.9 | 10.3 | 10.9 | 11.5 | 11.3 | 11.0 | 10.9 | 10.4 | 10.7 | 9.6 | 10.6 | | | | | |
| 16817 | 9.7 | 8.6 | 10.1 | 10.2 | 10.0 | 11.0 | 10.0 | 10.3 | 11.2 | MM 2 | MM 2 | 9.6 | 9.8 | 5.3 | 4.8 | 10.7 | 10.1 | | | |
| 16818 | 10.5 | 10.1 | 10.2 | 10.7 | 9.9 | 10.9 | 9.4 | 10.6 | 9.9 | 9.8 | 10.1 | 10.4 | 9.7 | 10.3 | 9.6 | | | | | |
| 16820 | 10.9 | 9.3 | 11.7 | 10.7 | 11.7 | 11.2 | 10.6 | 11.3 | 10.7 | 10.1 | 10.6 | 11.0 | 10.4 | FS | | | | | | |
| 16822 | 10.6 | 11.4 | 10.8 | 11.6 | 11.8 | 10.6 | 10.9 | 10.9 | 11.0 | 10.8 | 10.2 | 9.0 | 12.0 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

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TABLE D41 (PAGE 10): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | LACTATION DAY 5 PRECULLING | | | | | | |
| 16823 | 8.1 | 7.6 | 8.2 | 8.0 | 8.7 | 8.2 | 7.6 | 7.1 | 7.9 | 8.1 | 8.5 | 8.8 | 8.0 | 8.0 | | | | | | |
| 16825 | 9.7 | 9.2 | 9.3 | 9.1 | 9.8 | 9.1 | 10.2 | 9.4 | 9.5 | 8.6 | 8.5 | 9.3 | 9.3 | 9.6 | 8.8 | | | | | |
| 16826 | 9.9 | 9.6 | 10.2 | 10.9 | 10.1 | 10.7 | 10.1 | 11.4 | 8.8 | 9.8 | MD 4 | 10.1 | 10.0 | 10.5 | 9.8 | 10.0 | 7.0 | FD 1 | | |
| 16827 | 10.4 | 10.8 | 10.4 | 9.4 | 10.7 | 10.9 | 10.7 | 10.5 | 10.9 | 9.7 | 10.1 | 10.0 | 9.5 | 9.4 | FD 3 | | | | | |
| 16828 | 11.5 | 10.7 | 11.7 | 11.4 | 10.8 | 11.1 | 10.1 | 10.4 | 10.9 | 11.4 | 10.3 | 10.8 | 9.4 | 11.0 | 10.6 | 10.9 | | | | |
| 16830 | 11.1 | 10.6 | 11.0 | 9.8 | 11.2 | 10.1 | 10.2 | 9.9 | 9.3 | 10.1 | 10.5 | 10.2 | 9.5 | 9.9 | | | | | | |
| 16831 | 10.1 | 9.1 | 10.7 | 9.2 | 9.4 | MD 1 | 8.7 | 8.9 | 9.4 | 8.8 | 9.9 | 9.9 | 9.1 | 8.5 | 10.1 | 9.0 | 9.4 | | | |
| 16833 | 8.4 | 8.5 | 8.6 | 9.4 | 9.0 | 7.3 | 6.9 | 8.7 | 8.6 | 8.4 | 7.0 | 8.7 | 8.4 | 8.3 | 6.7 | 8.4 | 8.8 | | | |
| 16834 | 9.4 | 9.4 | 8.5 | 9.1 | 9.0 | 9.0 | 9.0 | 8.5 | 7.4 | 8.5 | 8.6 | 8.5 | 8.1 | 7.8 | 7.8 | 8.9 | 7.5 | | | |
| 16836 | 12.1 | 11.4 | 10.3 | 10.6 | 12.1 | 11.2 | 12.0 | MS | MS | 11.2 | 11.0 | 11.6 | 11.0 | 10.9 | 8.2 | 10.2 | FS | | | |
| 16837 | 9.8 | 9.0 | 9.2 | 8.7 | 9.5 | 8.7 | 9.1 | 9.1 | 7.0 | 9.6 | 8.2 | 8.6 | 7.7 | 7.5 | 9.5 | 6.6 | 5.0 | 8.9 | 6.5 | FD 4 |
| 16839 | 9.3 | 10.8 | 9.0 | 9.3 | 9.7 | 10.3 | 9.6 | 11.2 | 10.7 | 10.1 | 8.1 | 10.7 | 10.2 | | | | | | | |
| 16840 | 12.4 | 12.4 | 12.3 | 13.1 | 12.5 | 13.0 | 11.7 | 12.3 | 9.8 | 12.7 | 12.6 | 12.5 | 12.3 | | | | | | | |
| 16842 | 11.1 | 12.4 | 11.2 | 11.5 | 11.2 | 11.5 | 11.2 | 11.6 | 11.1 | 11.5 | 10.7 | 11.1 | 10.8 | 10.8 | | | | | | |
| 16843 | 10.9 | 10.5 | 10.5 | 11.0 | 7.2 | 8.1 | 10.1 | 7.7 | 10.3 | 10.4 | 10.0 | 9.5 | 10.0 | 9.0 | 7.5 | | | | | |
| 16844 | 10.3 | 10.8 | 10.5 | 10.1 | 10.6 | 10.2 | 9.5 | 10.7 | 9.9 | 10.2 | 7.8 | 9.7 | 10.6 | 9.7 | 11.0 | 9.2 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 11): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 5 POSTCULLING | | | | | | | |
| 16731 | MC 5 | 10.6 | MC 5 | 10.0 | 9.2 | MC 5 | 9.8 | MC 5 | 9.8 | 9.5 | 9.8 | 9.9 | | | | | | | | |
| 16732 | 9.5 | 10.2 | 8.4 | 8.4 | FC 5 | FC 5 | 9.9 | 10.0 | FC 5 | 10.2 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 9.4 | FC 5 | FC 5 | | |
| 16734 | MC 5 | 10.7 | 11.1 | MC 5 | 11.6 | 11.0 | 11.2 | 12.2 | FC 5 | 10.8 | FC 5 | 11.3 | FC 5 | FC 5 | | | | | | |
| 16735 | MC 5 | MC 5 | MC 5 | 9.2 | MC 5 | MC 5 | 9.1 | 9.0 | 8.7 | FC 5 | 8.7 | 8.3 | 8.0 | FC 5 | 7.3 | | | | | |
| 16736 | 8.7 | 8.4 | 8.7 | MC 5 | MC 5 | 9.1 | MC 5 | MC 5 | MC 5 | 8.2 | 6.9 | 9.3 | FC 5 | 7.9 | | | | | | |
| 16737 | MC 5 | 7.8 | 9.5 | 8.3 | MC 5 | MC 5 | 8.6 | 7.4 | 7.7 | 7.6 | FC 5 | 8.4 | FC 5 | FC 5 | FC 5 | FD 2 | | | | |
| 16738 | MC 5 | 10.2 | 9.8 | MC 5 | MC 5 | MC 5 | 10.1 | 10.5 | 10.1 | MC 5 | 9.2 | 9.9 | 9.7 | FD 2 | | | | | | |
| 16740 | 7.4 | 7.7 | 6.8 | 8.0 | MS | FC 5 | FC 5 | 6.9 | FC 5 | FC 5 | 7.6 | FC 5 | FC 5 | 6.9 | FC 5 | 7.0 | FC 5 | | | |
| 16741 | 10.0 | MC 5 | MC 5 | 9.7 | 9.1 | MC 5 | 8.8 | 8.4 | FC 5 | 8.9 | 8.6 | 7.9 | FC 5 | FC 5 | FC 5 | | | | | |
| 16742 | MC 5 | MC 5 | MC 5 | 9.0 | 9.7 | 9.9 | 9.7 | MC 5 | MC 5 | MC 5 | 9.0 | 9.1 | FC 5 | 8.5 | 7.3 | FS | | | | |
| 16745 | 9.3 | MC 5 | MC 5 | 8.7 | MC 5 | MC 5 | MC 5 | 8.7 | 9.5 | 8.4 | FC 5 | 9.1 | FC 5 | FC 5 | 8.2 | 8.5 | | | | |
| 16746 | MC 5 | MC 5 | 7.8 | MC 5 | 7.5 | 7.9 | 8.5 | FC 5 | FC 5 | 7.9 | FC 5 | FC 5 | 8.0 | 7.7 | 7.4 | | | | | |
| 16747 | 9.6 | MC 5 | 9.7 | 8.3 | 9.0 | 9.1 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 9.0 | 7.9 | 9.4 | | | | | |
| 16749 | MC 5 | MC 5 | 10.1 | 9.8 | MC 5 | 10.6 | MC 5 | 8.8 | MC 5 | MC 5 | 8.6 | FC 5 | 8.6 | 8.1 | 9.6 | FC 5 | | | | |
| 16750 | MC 5 | MC 5 | MC 5 | 9.4 | 7.7 | 10.7 | 9.8 | 9.7 | FC 5 | FC 5 | FC 5 | 10.3 | 9.1 | 9.8 | FC 5 | FC 5 | | | | |
| 16753 | MC 5 | MC 5 | 8.7 | 8.6 | 8.0 | MC 5 | MC 5 | MC 5 | 9.0 | 8.3 | 8.8 | 7.9 | FC 5 | 8.6 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 12): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | LACTATION DAY 5 POSTCULLING | | | | | | | |
| 16755 | 9.9 | 9.9 | MC 5 | 9.1 | 8.3 | FC 5 | FC 5 | 8.1 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 9.7 | 8.7 | 7.4 | | | |
| 16758 | 9.5 | MC 5 | 10.4 | MC 5 | 10.3 | 10.2 | FC 5 | FC 5 | 9.9 | 9.7 | FC 5 | FC 5 | 7.7 | 8.9 | | | | | | |
| 16760 | 10.8 | 8.8 | MC 5 | 10.8 | MC 5 | MC 5 | 10.8 | MC 5 | MC 5 | MC 5 | 9.0 | 9.0 | 10.1 | 8.8 | | | | | | |
| 16761 | MC 5 | MC 5 | 10.7 | MC 5 | 9.4 | 9.7 | 9.8 | 9.5 | 9.3 | FC 5 | 8.8 | 9.7 | | | | | | | | |
| 16762 | MC 5 | 9.9 | MC 5 | MC 5 | 9.1 | 9.7 | 9.8 | 9.7 | 9.0 | 9.5 | 9.5 | FC 5 | FC 5 | FC 5 | | | | | | |
| 16763 | MC 5 | 9.9 | 11.3 | 10.9 | 9.9 | MC 5 | MC 5 | MC 5 | MS | 11.2 | FC 5 | 9.8 | 10.3 | 9.8 | FC 5 | | | | | |
| 16764 | 9.8 | 9.6 | 10.0 | 9.4 | 9.9 | FC 5 | 9.7 | FC 5 | FC 5 | FC 5 | 9.7 | FC 5 | FC 5 | 9.7 | | | | | | |
| 16765 | 10.3 | 10.4 | 10.3 | 9.9 | MC 5 | MC 5 | MC 5 | MS | FC 5 | FC 5 | 9.8 | 9.9 | 9.7 | 9.0 | | | | | | |
| 16767 | MC 5 | 10.7 | MC 5 | 10.1 | MC 5 | 11.1 | MC 5 | 7.1 | 10.7 | FC 5 | 9.9 | 10.2 | FC 5 | 10.7 | FC 5 | | | | | |
| 16768 | 10.1 | MC 5 | 11.7 | 10.1 | 9.2 | MC 5 | MC 5 | MC 5 | MC 5 | FC 5 | FC 5 | 8.8 | 9.2 | FC 5 | 9.1 | 7.2 | | | | |
| 16769 | MC 5 | MC 5 | 9.2 | MC 5 | MC 5 | 10.5 | MC 5 | MC 5 | 7.7 | 10.1 | FC 5 | 9.4 | 9.0 | 8.9 | FC 5 | 9.7 | | | | |
| 16770 | 10.9 | MC 5 | MC 5 | 11.6 | 11.4 | 11.1 | MC 5 | 10.1 | FC 5 | FC 5 | FC 5 | FC 5 | 9.6 | 11.2 | 11.1 | | | | | |
| 16771 | 10.3 | MC 5 | MC 5 | MC 5 | 10.2 | 10.9 | 9.6 | 9.6 | 9.3 | FC 5 | 9.9 | FC 5 | FC 5 | 9.5 | | | | | | |
| 16773 | 8.8 | 8.6 | 10.5 | 10.0 | FC 5 | FC 5 | FC 5 | FC 5 | 9.5 | 8.5 | FC 5 | FC 5 | 9.9 | FC 5 | 8.3 | | | | | |
| 16774 | MC 5 | 10.1 | 9.6 | 9.8 | 9.8 | MC 5 | FC 5 | FC 5 | 10.8 | 9.4 | FC 5 | 8.6 | 9.9 | | | | | | | |
| 16776 | MC 5 | 9.0 | 8.7 | MC 5 | 8.0 | MC 5 | MC 5 | 9.5 | MC 5 | MD 2 | 9.3 | FC 5 | 8.7 | FC 5 | 9.1 | 8.5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 13): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | LACTATION DAY 5 POSTCULLING | | | | | | | |
| 16781 | MC 5 | 9.3 | 5.5 | MC 5 | 9.5 | 9.0 | 9.4 | FC 5 | FC 5 | FC 5 | 9.0 | 9.2 | 6.7 | FC 5 | | | | | | |
| 16782 | MC 5 | 8.8 | 9.0 | 9.8 | 10.2 | MC 5 | MC 5 | MC 5 | MC 5 | 9.2 | FC 5 | 10.8 | 10.2 | FC 5 | FC 5 | 9.9 | FC 5 | | | |
| 16783 | 9.8 | MC 5 | 9.5 | MC 5 | 9.5 | MC 5 | 8.3 | 8.1 | FC 5 | 9.1 | FC 5 | FC 5 | 8.9 | FC 5 | FC 5 | 8.4 | FC 5 | | | |
| 16784 | 10.1 | MC 5 | MC 5 | 8.4 | MC 5 | 10.1 | 9.9 | FC 5 | 10.0 | 10.6 | 10.5 | 8.9 | | | | | | | | |
| 16786 | 10.2 | 9.0 | 10.3 | FC 5 | 9.5 | 9.3 | FC 5 | FC 5 | FC 5 | 10.7 | 9.5 | 10.4 | FC 5 | FC 5 | | | | | | |
| 16787 | 7.4 | 8.4 | 8.4 | MC 5 | MC 5 | MC 5 | 8.7 | 8.6 | FC 5 | 8.7 | 8.9 | FC 5 | 8.3 | FC 5 | FC 5 | FC 5 | | | | |
| 16791 | MC 5 | MC 5 | 11.3 | 11.5 | 12.5 | 11.5 | 10.9 | 10.7 | 11.0 | FC 5 | 11.0 | | | | | | | | | |
| 16792 | 8.9 | 8.1 | MC 5 | 8.8 | 9.6 | MC 5 | 8.6 | FC 5 | 8.6 | 8.2 | 9.6 | FC 5 | FC 5 | | | | | | | |
| 16793 | 10.9 | 10.8 | MC 5 | 10.8 | 10.6 | MC 5 | 10.2 | FC 5 | 10.7 | 10.6 | 9.4 | | | | | | | | | |
| 16794 | 9.4 | MC 5 | MC 5 | MC 5 | 9.1 | 9.5 | 8.8 | MC 5 | 8.3 | 8.4 | FC 5 | 9.0 | FC 5 | 8.0 | FC 5 | FC 5 | | | | |
| 16795 | MC 5 | MC 5 | MC 5 | 8.5 | 9.0 | MC 5 | 8.9 | MC 5 | MC 5 | 8.7 | 8.8 | 9.1 | FC 5 | FC 5 | 8.8 | FC 5 | 7.9 | FD 1 | | |
| 16796 | MC 5 | MC 5 | MC 5 | 9.1 | 9.3 | 9.7 | 9.5 | 8.9 | 8.9 | 7.2 | 9.7 | | | | | | | | | |
| 16797 | MC 5 | MC 5 | 9.4 | 9.7 | MC 5 | 9.1 | MC 5 | MC 5 | MC 5 | MC 5 | 9.1 | 7.6 | 8.6 | 7.8 | 8.5 | 9.0 | | | | |
| 16798 | MC 5 | MC 5 | 10.8 | MC 5 | MC 5 | 7.0 | 9.8 | 10.4 | FC 5 | 8.4 | 9.8 | 9.3 | FC 5 | 9.1 | FM 3 | | | | | |
| 16799 | MC 5 | MC 5 | MC 5 | MC 5 | 10.0 | 9.1 | 8.6 | MC 5 | 8.7 | 8.8 | FC 5 | 9.3 | 8.5 | FC 5 | 9.8 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 14): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 5 POSTCULLING | | | | | | |
| 16800 | MC 5 | MC 5 | MC 5 | 9.3 | 7.0 | 8.9 | 8.9 | 8.3 | 9.2 | 8.9 | 8.3 | FC 5 | FC 5 | | | | | | | |
| 16801 | 8.2 | 9.7 | MC 5 | MC 5 | 7.8 | 8.9 | 8.5 | 8.6 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 7.5 | FC 5 | 6.0 | | |
| 16802 | MC 5 | 9.8 | 9.9 | 10.2 | 10.4 | 9.1 | FC 5 | FC 5 | 10.2 | FC 5 | 9.6 | FC 5 | FC 5 | 8.7 | FD 3 | | | | | |
| 16803 | 11.0 | 11.2 | 9.8 | 11.3 | 9.1 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 10.4 | FC 5 | 10.2 | FC 5 | 9.6 | | | | |
| 16805 | 10.8 | MC 5 | MC 5 | 11.1 | MC 5 | 11.4 | 11.1 | MC 5 | MC 5 | MS | 9.9 | 10.9 | 10.9 | 10.6 | FC 5 | UU | | | | |
| 16806 | 9.6 | 9.7 | 9.7 | MC 5 | 9.9 | FC 5 | FC 5 | FM 2 | 9.5 | FC 5 | FC 5 | 9.6 | 9.7 | FC 5 | 7.9 | | | | | |
| 16807 | MC 5 | MC 5 | MC 5 | 8.5 | MC 5 | 9.2 | 9.5 | 9.3 | MC 5 | 9.2 | FC 5 | 8.5 | 8.8 | FC 5 | 9.9 | FC 5 | | | | |
| 16808 | MC 5 | 11.0 | 9.9 | 9.2 | 9.5 | MC 5 | 9.0 | FC 5 | 9.2 | 9.3 | FC 5 | FC 5 | 8.8 | | | | | | | |
| 16810 | 10.4 | MC 5 | 9.7 | MC 5 | 10.0 | 9.8 | FC 5 | 9.2 | 9.5 | 9.5 | 8.9 | FC 5 | FC 5 | FD 4 | FS | | | | | |
| 16811 | MC 5 | 8.1 | 9.0 | MC 5 | 8.6 | MC 5 | 9.2 | MC 5 | 9.5 | FC 5 | FC 5 | 7.1 | 9.7 | 8.7 | FC 5 | | | | | |
| 16814 | 9.8 | MC 5 | MC 5 | 11.8 | 10.9 | 10.4 | MC 5 | FC 5 | 9.8 | 10.5 | FC 5 | 10.2 | 10.7 | FC 5 | | | | | | |
| 16815 | 11.0 | MC 5 | MC 5 | MC 5 | 10.9 | MC 5 | 10.9 | 11.5 | 11.3 | 11.0 | FC 5 | FC 5 | 10.7 | FC 5 | 10.6 | | | | | |
| 16817 | 9.7 | MC 5 | 10.1 | MC 5 | 10.0 | MC 5 | 10.0 | MC 5 | MC 5 | MM 2 | MM 2 | FC 5 | FC 5 | 5.3 | 4.8 | 10.7 | 10.1 | | | |
| 16818 | MC 5 | MC 5 | MC 5 | 10.7 | MC 5 | 10.9 | 9.4 | 10.6 | 9.9 | 9.8 | FC 5 | FC 5 | 9.7 | 10.3 | FC 5 | | | | | |
| 16820 | 10.9 | 9.3 | MC 5 | MC 5 | 11.7 | MC 5 | 10.6 | 11.3 | 10.7 | 10.1 | FC 5 | 11.0 | FC 5 | FS | | | | | | |
| 16822 | MC 5 | 11.4 | 10.8 | 11.6 | 11.8 | FC 5 | FC 5 | FC 5 | 11.0 | FC 5 | 10.2 | 9.0 | 12.0 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 15): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | LACTATION DAY 5 POSTCULLING | | | | | | |
| 16823 | 8.1 | MC 5 | 8.2 | 8.0 | MC 5 | 8.2 | FC 5 | 7.1 | 7.9 | FC 5 | 8.5 | FC 5 | 8.0 | FC 5 | | | | | | |
| 16825 | MC 5 | MC 5 | 9.3 | MC 5 | 9.8 | MC 5 | 10.2 | MC 5 | 9.5 | 8.6 | 8.5 | 9.3 | 9.3 | FC 5 | FC 5 | | | | | |
| 16826 | 9.9 | MC 5 | 10.2 | MC 5 | MC 5 | MC 5 | 10.1 | MC 5 | MC 5 | 9.8 | MD 4 | 10.1 | 10.0 | 10.5 | 9.8 | FC 5 | FC 5 | FD 1 | | |
| 16827 | MC 5 | MC 5 | 10.4 | 9.4 | 10.7 | MC 5 | MC 5 | 10.5 | 10.9 | FC 5 | 10.1 | 10.0 | FC 5 | 9.4 | FD 3 | | | | | |
| 16828 | 11.5 | 10.7 | 11.7 | 11.4 | MC 5 | MC 5 | FC 5 | FC 5 | 10.9 | FC 5 | 10.3 | FC 5 | FC 5 | 11.0 | FC 5 | 10.9 | | | | |
| 16830 | 11.1 | MC 5 | 11.0 | 9.8 | MC 5 | 10.1 | FC 5 | FC 5 | 9.3 | FC 5 | FC 5 | 10.2 | 9.5 | 9.9 | | | | | | |
| 16831 | 10.1 | MC 5 | 10.7 | 9.2 | 9.4 | MD 1 | FC 5 | FC 5 | 9.4 | FC 5 | FC 5 | 9.9 | FC 5 | FC 5 | 10.1 | FC 5 | 9.4 | | | |
| 16833 | MC 5 | 8.5 | 8.6 | 9.4 | MC 5 | MC 5 | 6.9 | MC 5 | MC 5 | 8.4 | FC 5 | FC 5 | 8.4 | 8.3 | FC 5 | 8.4 | FC 5 | | | |
| 16834 | 9.4 | 9.4 | MC 5 | 9.1 | MC 5 | MC 5 | MC 5 | MC 5 | 7.4 | 8.5 | 8.6 | FC 5 | 8.1 | FC 5 | FC 5 | 8.9 | FC 5 | | | |
| 16836 | MC 5 | 11.4 | 10.3 | 10.6 | MC 5 | MC 5 | 12.0 | MS | MS | FC 5 | 11.0 | 11.6 | 11.0 | 10.9 | FC 5 | FC 5 | FS | | | |
| 16837 | 9.8 | MC 5 | 9.2 | MC 5 | MC 5 | MC 5 | 9.1 | MC 5 | MC 5 | 9.6 | FC 5 | 8.6 | 7.7 | 7.5 | FC 5 | FC 5 | FC 5 | 8.9 | FC 5 | FD 4 |
| 16839 | 9.3 | MC 5 | 9.0 | 9.3 | 9.7 | MC 5 | MC 5 | MC 5 | 10.7 | 10.1 | 8.1 | 10.7 | FC 5 | | | | | | | |
| 16840 | 12.4 | MC 5 | MC 5 | MC 5 | 12.5 | 13.0 | MC 5 | 12.3 | 9.8 | 12.7 | FC 5 | 12.5 | 12.3 | | | | | | | |
| 16842 | MC 5 | MC 5 | 11.2 | 11.5 | 11.2 | MC 5 | 11.2 | MC 5 | 11.1 | 11.5 | 10.7 | FC 5 | 10.8 | FC 5 | | | | | | |
| 16843 | 10.9 | MC 5 | 10.5 | 11.0 | 7.2 | FC 5 | FC 5 | FC 5 | 10.3 | FC 5 | 10.0 | 9.5 | 10.0 | FC 5 | FC 5 | | | | | |
| 16844 | 10.3 | MC 5 | MC 5 | MC 5 | MC 5 | 10.2 | 9.5 | 10.7 | MC 5 | 10.2 | FC 5 | 9.7 | 10.6 | FC 5 | 11.0 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 16): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 8 | | | | | | | |
| 16731 | MC 5 | 15.1 | MC 5 | 13.9 | 15.7 | MC 5 | 16.2 | MC 5 | 14.9 | 15.1 | 15.0 | 15.3 | | | | | | | | |
| 16732 | 16.1 | 17.0 | 14.1 | 14.0 | FC 5 | FC 5 | 15.8 | 16.8 | FC 5 | 16.4 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 15.9 | FC 5 | FC 5 | | |
| 16734 | MC 5 | 17.9 | 19.0 | MC 5 | 17.4 | 17.6 | 18.3 | 18.6 | FC 5 | 18.2 | FC 5 | 18.7 | FC 5 | FC 5 | | | | | | |
| 16735 | MC 5 | MC 5 | MC 5 | 17.1 | MC 5 | MC 5 | 16.4 | 14.8 | 11.3 | FC 5 | 15.1 | 14.5 | 15.4 | FC 5 | 10.0 | | | | | |
| 16736 | 10.2 | 11.0 | 10.5 | MC 5 | MC 5 | 12.2 | MC 5 | MC 5 | MC 5 | 10.3 | 11.2 | 8.7 | FC 5 | 9.2 | | | | | | |
| 16737 | MC 5 | 14.5 | 12.9 | 12.4 | MC 5 | MC 5 | 11.3 | 12.4 | 12.8 | 11.9 | FC 5 | 14.1 | FC 5 | FC 5 | FC 5 | FD 2 | | | | |
| 16738 | MC 5 | 17.0 | 16.1 | MC 5 | MC 5 | MC 5 | 18.7 | 17.2 | 17.3 | MC 5 | 16.0 | 17.1 | 16.0 | FD 2 | | | | | | |
| 16740 | 11.3 | 12.9 | 12.6 | 12.2 | MS | FC 5 | FC 5 | 12.4 | FC 5 | FC 5 | 11.5 | FC 5 | FC 5 | 12.0 | FC 5 | 11.5 | FC 5 | | | |
| 16741 | 14.5 | MC 5 | MC 5 | 15.2 | 14.3 | MC 5 | 15.2 | 14.4 | FC 5 | 14.3 | 13.6 | 13.4 | FC 5 | FC 5 | FC 5 | | | | | |
| 16742 | MC 5 | MC 5 | MC 5 | 16.5 | 15.5 | 15.2 | 16.4 | MC 5 | MC 5 | MC 5 | 14.6 | 14.0 | FC 5 | 15.8 | 11.7 | FS | | | | |
| 16745 | 12.4 | MC 5 | MC 5 | 16.4 | MC 5 | MC 5 | MC 5 | 11.5 | 13.9 | 14.4 | FC 5 | 12.2 | FC 5 | FC 5 | 10.5 | 13.8 | | | | |
| 16746 | MC 5 | MC 5 | 6.7 | MC 5 | 8.5 | 7.5 | 7.4 | FC 5 | FC 5 | 7.0 | FC 5 | FC 5 | 7.3 | 8.6 | 7.9 | | | | | |
| 16747 | 16.1 | MC 5 | 14.2 | 15.0 | 15.6 | 15.1 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 13.1 | 15.0 | 12.7 | | | | | |
| 16749 | MC 5 | MC 5 | 16.9 | 13.8 | MC 5 | 15.6 | MC 5 | 15.9 | MC 5 | MC 5 | 12.7 | FC 5 | 14.0 | 15.5 | 12.5 | FC 5 | | | | |
| 16750 | MC 5 | MC 5 | MC 5 | 16.5 | 16.2 | 13.7 | 17.8 | 16.8 | FC 5 | FC 5 | FC 5 | 17.0 | 17.2 | 14.8 | FC 5 | FC 5 | | | | |
| 16753 | MC 5 | MC 5 | 13.5 | 13.9 | 12.6 | MC 5 | MC 5 | MC 5 | 13.8 | 13.1 | 13.2 | 13.6 | FC 5 | 14.0 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 17): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | LACTATION DAY 8 | | | | | | | |
| 16755 | 17.1 | 13.0 | MC 5 | 15.4 | 15.9 | FC 5 | FC 5 | 11.7 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 14.7 | 13.9 | 16.8 | | | |
| 16758 | 15.1 | MC 5 | 14.8 | MC 5 | 11.4 | 13.8 | FC 5 | FC 5 | 16.3 | 13.6 | FC 5 | FC 5 | 12.1 | 9.8 | | | | | | |
| 16760 | 17.8 | 11.5 | MC 5 | 15.1 | MC 5 | MC 5 | 17.8 | MC 5 | MC 5 | MC 5 | 9.7 | 11.2 | 13.3 | 9.8 | | | | | | |
| 16761 | MC 5 | MC 5 | 15.9 | MC 5 | 18.0 | 16.7 | 11.6 | 16.4 | 12.2 | FC 5 | 12.9 | 16.0 | | | | | | | | |
| 16762 | MC 5 | 16.4 | MC 5 | MC 5 | 16.8 | 15.7 | 16.6 | 14.5 | 16.0 | 13.6 | 15.4 | FC 5 | FC 5 | FC 5 | | | | | | |
| 16763 | MC 5 | 17.9 | 15.6 | 17.2 | 16.9 | MC 5 | MC 5 | MC 5 | MS | 17.6 | FC 5 | 16.3 | 16.3 | 17.9 | FC 5 | | | | | |
| 16764 | 16.4 | 16.6 | 16.1 | 16.3 | 16.9 | FC 5 | 15.8 | FC 5 | FC 5 | FC 5 | 16.8 | FC 5 | FC 5 | 16.2 | | | | | | |
| 16765 | 16.3 | 17.1 | 16.8 | 16.2 | MC 5 | MC 5 | MC 5 | MS | FC 5 | FC 5 | 16.2 | 15.0 | 15.8 | 15.8 | | | | | | |
| 16767 | MC 5 | 18.7 | MC 5 | 17.6 | MC 5 | 16.8 | MC 5 | 11.9 | 17.1 | FC 5 | 17.4 | 17.6 | FC 5 | 18.1 | FC 5 | | | | | |
| 16768 | 17.3 | MC 5 | 20.0 | 18.2 | 16.0 | MC 5 | MC 5 | MC 5 | MC 5 | FC 5 | FC 5 | 15.8 | 16.4 | FC 5 | 11.9 | 15.7 | | | | |
| 16769 | MC 5 | MC 5 | 9.2 | MC 5 | MC 5 | 15.4 | MC 5 | MC 5 | 17.1 | 17.9 | FC 5 | 13.6 | 15.4 | 16.7 | FC 5 | 15.9 | | | | |
| 16770 | 19.5 | MC 5 | MC 5 | 18.4 | 18.6 | 18.0 | MC 5 | 16.3 | FC 5 | FC 5 | FC 5 | FC 5 | 18.1 | 16.8 | 17.8 | | | | | |
| 16771 | 17.7 | MC 5 | MC 5 | MC 5 | 18.3 | 16.3 | 16.7 | 15.8 | 16.2 | FC 5 | 15.2 | FC 5 | FC 5 | 16.6 | | | | | | |
| 16773 | 17.5 | 13.5 | 15.4 | 17.2 | FC 5 | FC 5 | FC 5 | FC 5 | 14.3 | 14.3 | FC 5 | FC 5 | 17.6 | FC 5 | 16.9 | | | | | |
| 16774 | MC 5 | 15.3 | 16.2 | 15.3 | 15.7 | MC 5 | FC 5 | FC 5 | 15.2 | 15.1 | FC 5 | 15.4 | 13.6 | | | | | | | |
| 16776 | MC 5 | 15.3 | 14.0 | MC 5 | 13.7 | MC 5 | MC 5 | 15.4 | MC 5 | MD 2 | 14.8 | FC 5 | 15.3 | FC 5 | 14.7 | 14.4 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 18): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | LACTATION DAY 8 | | | | | | | |
| 16781 | MC 5 | 10.0 | 15.6 | MC 5 | 16.6 | 16.0 | 14.4 | FC 5 | FC 5 | FC 5 | 11.7 | 16.0 | 15.9 | FC 5 | | | | | | |
| 16782 | MC 5 | 18.3 | 16.6 | 15.7 | 18.1 | MC 5 | MC 5 | MC 5 | MC 5 | 17.2 | FC 5 | 18.2 | 17.6 | FC 5 | FC 5 | 16.9 | FC 5 | | | |
| 16783 | 14.4 | MC 5 | 16.1 | MC 5 | 15.9 | MC 5 | 16.6 | 15.5 | FC 5 | 14.7 | FC 5 | FC 5 | 14.2 | FC 5 | FC 5 | 13.2 | FC 5 | | | |
| 16784 | 14.0 | MC 5 | MC 5 | 10.2 | MC 5 | 16.9 | 16.9 | FC 5 | 17.4 | 17.1 | 17.8 | 15.3 | | | | | | | | |
| 16786 | 16.3 | 16.8 | 15.2 | FC 5 | 15.9 | 15.5 | FC 5 | FC 5 | FC 5 | 17.7 | 15.6 | 14.7 | FC 5 | FC 5 | | | | | | |
| 16787 | 15.1 | 14.4 | 12.6 | MC 5 | MC 5 | MC 5 | 14.6 | 14.8 | FC 5 | 14.8 | 13.4 | FC 5 | 14.0 | FC 5 | FC 5 | FC 5 | | | | |
| 16791 | MC 5 | MC 5 | 19.5 | 17.9 | 17.6 | 17.6 | 16.8 | 16.9 | 17.0 | FC 5 | 17.2 | | | | | | | | | |
| 16792 | 16.5 | 15.2 | MC 5 | 14.7 | 14.4 | MC 5 | 14.1 | FC 5 | 15.3 | 10.0 | FM 7 | FC 5 | FC 5 | | | | | | | |
| 16793 | 17.1 | 17.2 | MC 5 | 16.8 | 16.3 | MC 5 | 16.4 | FC 5 | 16.0 | 16.3 | 17.2 | | | | | | | | | |
| 16794 | 14.4 | MC 5 | MC 5 | MC 5 | 15.2 | 15.0 | 15.0 | MC 5 | 13.8 | 13.2 | FC 5 | 14.3 | FC 5 | 12.8 | FC 5 | FC 5 | | | | |
| 16795 | MC 5 | MC 5 | MC 5 | 15.4 | 16.5 | MC 5 | 16.5 | MC 5 | MC 5 | 15.4 | 15.0 | 13.7 | FC 5 | FC 5 | 16.2 | FC 5 | 16.1 | FD 1 | | |
| 16796 | MC 5 | MC 5 | MC 5 | 16.2 | 15.1 | 15.7 | 15.0 | 15.3 | 11.5 | 14.3 | 16.7 | | | | | | | | | |
| 16797 | MC 5 | MC 5 | 13.9 | 14.5 | MC 5 | 14.4 | MC 5 | MC 5 | MC 5 | MC 5 | 14.3 | FC 7 | 11.9 | 13.0 | 14.2 | 11.6 | | | | |
| 16798 | MC 5 | MC 5 | 15.6 | MC 5 | MC 5 | 11.2 | 15.5 | 10.4 | FC 5 | 18.5 | 14.9 | 12.0 | FC 5 | 8.3 | FM 3 | | | | | |
| 16799 | MC 5 | MC 5 | MC 5 | MC 5 | 15.9 | 15.4 | 17.3 | MC 5 | 14.8 | 14.8 | FC 5 | 17.1 | 16.7 | FC 5 | 15.2 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 19): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 8 | | | | | | |
| 16800 | MC 5 | MC 5 | MC 5 | 15.4 | 15.8 | 13.1 | 10.7 | 14.5 | 15.2 | 14.5 | 13.5 | FC 5 | FC 5 | | | | | | | |
| 16801 | 13.0 | 14.1 | MC 5 | MC 5 | 16.6 | 15.8 | 14.6 | 14.6 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 9.8 | FC 5 | 12.9 | | |
| 16802 | MC 5 | 13.4 | 16.6 | 16.3 | 15.7 | 15.5 | FC 5 | FC 5 | 16.5 | FC 5 | 14.5 | FC 5 | FC 5 | 10.6 | FD 3 | | | | | |
| 16803 | 19.5 | 18.5 | 16.4 | 17.3 | 17.7 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 15.0 | FC 5 | 17.0 | FC 5 | 15.5 | | | | |
| 16805 | 17.8 | MC 5 | MC 5 | 18.1 | MC 5 | 17.0 | 18.4 | MC 5 | MC 5 | MS | 17.0 | 16.1 | 17.3 | 16.9 | FC 5 | UU | | | | |
| 16806 | 15.9 | 16.5 | 16.6 | MC 5 | 16.5 | FC 5 | FC 5 | FM 2 | 15.9 | FC 5 | FC 5 | 15.5 | 15.4 | FC 5 | 13.8 | | | | | |
| 16807 | MC 5 | MC 5 | MC 5 | 12.9 | MC 5 | 15.1 | 12.5 | 13.0 | MC 5 | 13.7 | FC 5 | 15.5 | 14.6 | FC 5 | 11.0 | FC 5 | | | | |
| 16808 | MC 5 | 15.8 | 15.7 | 14.8 | 17.4 | MC 5 | 15.2 | FC 5 | 14.2 | 15.3 | FC 5 | FC 5 | 13.7 | | | | | | | |
| 16810 | 16.2 | MC 5 | 16.0 | MC 5 | 15.2 | 17.4 | FC 5 | 15.6 | 14.9 | 15.3 | 14.1 | FC 5 | FC 5 | FD 4 | FS | | | | | |
| 16811 | MC 5 | 14.1 | 15.1 | MC 5 | 13.8 | MC 5 | 16.0 | MC 5 | 12.1 | FC 5 | FC 5 | 14.1 | 16.4 | 16.0 | FC 5 | | | | | |
| 16814 | 17.5 | MC 5 | MC 5 | 16.1 | 18.6 | 20.0 | MC 5 | FC 5 | 17.5 | 17.3 | FC 5 | 17.6 | 18.6 | FC 5 | | | | | | |
| 16815 | 17.9 | MC 5 | MC 5 | MC 5 | 17.8 | MC 5 | 18.4 | 19.0 | 17.1 | 17.8 | FC 5 | FC 5 | 17.9 | FC 5 | 18.8 | | | | | |
| 16817 | 16.6 | MC 5 | 17.3 | MC 5 | 17.2 | MC 5 | 17.3 | MC 5 | MC 5 | MM 2 | MM 2 | FC 5 | FC 5 | 18.6 | 17.0 | 7.5 | 8.5 | | | |
| 16818 | MC 5 | MC 5 | MC 5 | 16.5 | MC 5 | 17.7 | 18.2 | 18.1 | 17.6 | 17.1 | FC 5 | FC 5 | 17.0 | 16.6 | FC 5 | | | | | |
| 16820 | 16.9 | 17.4 | MC 5 | MC 5 | 18.7 | MC 5 | 15.3 | 16.5 | 17.2 | 17.7 | FC 5 | 17.9 | FC 5 | FS | | | | | | |
| 16822 | MC 5 | 18.6 | 19.0 | 19.1 | 16.9 | FC 5 | FC 5 | FC 5 | 17.3 | FC 5 | 16.0 | 19.0 | 14.5 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 20): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | LACTATION DAY 8 | | | | | | | |
| 16823 | 13.5 | MC 5 | 13.6 | 13.6 | MC 5 | 13.8 | FC 5 | 13.8 | 13.6 | FC 5 | 11.6 | FC 5 | 14.9 | FC 5 | | | | | | |
| 16825 | MC 5 | MC 5 | 16.9 | MC 5 | 15.2 | MC 5 | 15.8 | MC 5 | 16.0 | 15.7 | 15.8 | 14.4 | 14.4 | FC 5 | FC 5 | | | | | |
| 16826 | 16.3 | MC 5 | 16.4 | MC 5 | MC 5 | MC 5 | 17.8 | MC 5 | MC 5 | 17.5 | MD 4 | 16.9 | 17.6 | 15.8 | 17.0 | FC 5 | FC 5 | FD 1 | | |
| 16827 | MC 5 | MC 5 | 16.0 | 16.5 | 16.8 | MC 5 | MC 5 | 15.0 | 15.7 | FC 5 | 15.2 | 16.2 | FC 5 | 16.1 | FD 3 | | | | | |
| 16828 | 18.1 | 19.0 | 18.8 | 19.0 | MC 5 | MC 5 | FC 5 | FC 5 | 18.5 | FC 5 | 16.9 | FC 5 | FC 5 | 17.5 | FC 5 | 18.5 | | | | |
| 16830 | 17.6 | MC 5 | 17.0 | 17.5 | MC 5 | 19.2 | FC 5 | FC 5 | 16.9 | FC 5 | FC 5 | 15.8 | 16.9 | 16.2 | | | | | | |
| 16831 | 16.3 | MC 5 | 17.6 | 16.3 | 17.2 | MD 1 | FC 5 | FC 5 | 16.5 | FC 5 | FC 5 | 16.5 | FC 5 | FC 5 | 16.9 | FC 5 | 16.0 | | | |
| 16833 | MC 5 | 15.9 | 14.3 | 13.9 | MC 5 | MC 5 | 11.6 | MC 5 | MC 5 | 14.2 | FC 5 | FC 5 | 14.3 | 14.4 | FC 5 | 13.5 | FC 5 | | | |
| 16834 | 15.2 | 16.3 | MC 5 | 13.2 | MC 5 | MC 5 | MC 5 | MC 5 | 15.4 | 15.3 | 13.8 | FC 5 | 15.0 | FC 5 | FC 5 | 14.4 | FC 5 | | | |
| 16836 | MC 5 | 20.5 | 18.3 | 19.3 | MC 5 | MC 5 | 18.5 | MS | MS | FC 5 | 18.7 | 18.1 | 19.2 | 17.9 | FC 5 | FC 5 | FS | | | |
| 16837 | 15.8 | MC 5 | 15.5 | MC 5 | MC 5 | MC 5 | 16.3 | MC 5 | MC 5 | 15.2 | FC 5 | 14.7 | 12.6 | 14.3 | FC 5 | FC 5 | FC 5 | 12.1 | FC 5 | FD 4 |
| 16839 | 11.6 | MC 5 | 11.4 | 14.0 | 11.7 | MC 5 | MC 5 | MC 5 | 12.9 | 12.6 | 9.6 | 15.9 | FC 5 | | | | | | | |
| 16840 | 20.1 | MC 5 | MC 5 | MC 5 | 21.2 | 20.0 | MC 5 | 19.4 | 20.3 | 20.0 | FC 5 | 14.2 | 19.5 | | | | | | | |
| 16842 | MC 5 | MC 5 | 19.5 | 20.1 | 19.6 | MC 5 | 20.1 | MC 5 | 20.0 | 18.7 | 19.0 | FC 5 | 18.2 | FC 5 | | | | | | |
| 16843 | 17.2 | MC 5 | 19.3 | MD 8 | 11.3 | FC 5 | FC 5 | FC 5 | 16.7 | FC 5 | 17.3 | 14.3 | 17.5 | FC 5 | FC 5 | | | | | |
| 16844 | 17.5 | MC 5 | MC 5 | MC 5 | MC 5 | 16.0 | 17.6 | 16.9 | MC 5 | 17.3 | FC 5 | 16.8 | 17.3 | FC 5 | 19.0 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 21): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 14 | | | | | | | |
| 16731 | MC 5 | 25.2 | MC 5 | 27.6 | 28.8 | MC 5 | 26.9 | MC 5 | 25.7 | 26.1 | 25.4 | 26.5 | | | | | | | | |
| 16732 | 29.9 | 27.0 | 26.5 | 30.3 | FC 5 | FC 5 | 30.0 | 29.9 | FC 5 | 29.8 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 28.9 | FC 5 | FC 5 | | |
| 16734 | MC 5 | 32.3 | 34.3 | MC 5 | 31.2 | 32.6 | 32.9 | 33.6 | FC 5 | 33.7 | FC 5 | 32.9 | FC 5 | FC 5 | | | | | | |
| 16735 | MC 5 | MC 5 | MC 5 | 31.8 | MC 5 | MC 5 | 31.7 | 25.0 | 29.8 | FC 5 | 29.8 | 30.2 | 28.9 | FC 5 | 24.5 | | | | | |
| 16736 | 19.9 | 20.8 | 26.7 | MC 5 | MC 5 | 19.1 | MC 5 | MC 5 | MC 5 | 16.2 | 21.2 | 20.9 | FC 5 | 20.9 | | | | | | |
| 16737 | MC 5 | 32.8 | 24.2 | 28.7 | MC 5 | MC 5 | 27.7 | 28.1 | 27.6 | 32.0 | FC 5 | 26.5 | FC 5 | FC 5 | FC 5 | FD 2 | | | | |
| 16738 | MC 5 | 31.2 | 31.4 | MC 5 | MC 5 | MC 5 | 31.3 | 33.7 | 31.2 | MC 5 | 30.0 | 30.0 | 31.2 | FD 2 | | | | | | |
| 16740 | 23.2 | 24.4 | 25.4 | 26.1 | MS | FC 5 | FC 5 | 23.9 | FC 5 | FC 5 | 24.2 | FC 5 | FC 5 | 23.4 | FC 5 | 17.8 | FC 5 | | | |
| 16741 | 27.4 | MC 5 | MC 5 | 25.8 | 27.0 | MC 5 | 25.4 | 26.0 | FC 5 | 24.9 | 25.8 | 25.7 | FC 5 | FC 5 | FC 5 | | | | | |
| 16742 | MC 5 | MC 5 | MC 5 | 32.0 | 29.6 | 32.5 | 31.0 | MC 5 | MC 5 | MC 5 | 28.3 | 26.7 | FC 5 | 32.0 | 30.0 | FS | | | | |
| 16745 | 32.2 | MC 5 | MC 5 | 24.2 | MC 5 | MC 5 | MC 5 | 27.6 | 25.5 | 28.7 | FC 5 | 27.2 | FC 5 | FC 5 | 30.7 | 24.0 | | | | |
| 16746 | MC 5 | MC 5 | 18.4 | MC 5 | 20.6 | 18.3 | 17.4 | FC 5 | FC 5 | 16.0 | FC 5 | FC 5 | 17.0 | 14.5 | FD13 | | | | | |
| 16747 | 31.5 | MC 5 | 30.2 | 31.3 | 29.9 | 25.4 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 31.3 | 28.9 | 27.1 | | | | | |
| 16749 | MC 5 | MC 5 | 31.0 | 31.0 | MC 5 | 29.0 | MC 5 | 26.0 | MC 5 | MC 5 | 28.0 | FC 5 | 26.0 | 25.0 | 24.0 | FC 5 | | | | |
| 16750 | MC 5 | MC 5 | MC 5 | 31.9 | 34.6 | 32.7 | 28.1 | 31.9 | FC 5 | FC 5 | FC 5 | 32.6 | 32.6 | 29.0 | FC 5 | FC 5 | | | | |
| 16753 | MC 5 | MC 5 | 26.6 | 26.7 | 25.2 | MC 5 | MC 5 | MC 5 | 26.7 | 26.3 | 25.2 | 26.5 | FC 5 | 25.3 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 22): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | LACTATION DAY 14 | | | | | | | |
| 16755 | 33.9 | 32.1 | MC 5 | 29.8 | 24.8 | FC 5 | FC 5 | 23.6 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 30.8 | 29.2 | 30.8 | | | |
| 16758 | 28.1 | MC 5 | 22.5 | MC 5 | 24.5 | 28.0 | FC 5 | FC 5 | 24.0 | 24.5 | FC 5 | FC 5 | 18.1 | 30.8 | | | | | | |
| 16760 | 26.0 | 32.9 | MC 5 | 31.4 | MC 5 | MC 5 | 30.4 | MC 5 | MC 5 | MC 5 | 22.8 | 21.4 | 25.8 | 25.1 | | | | | | |
| 16761 | MC 5 | MC 5 | 32.2 | MC 5 | 31.7 | 26.1 | 34.8 | 32.4 | 22.5 | FC 5 | 31.4 | 26.0 | | | | | | | | |
| 16762 | MC 5 | 30.0 | MC 5 | MC 5 | 29.0 | 29.0 | 28.0 | 30.0 | 25.0 | 29.0 | 29.0 | FC 5 | FC 5 | FC 5 | | | | | | |
| 16763 | MC 5 | 34.0 | 31.5 | 35.1 | 34.9 | MC 5 | MC 5 | MC 5 | MS | 36.0 | FC 5 | 33.0 | 32.7 | 34.8 | FC 5 | | | | | |
| 16764 | 32.7 | 31.9 | 30.6 | 30.5 | 31.8 | FC 5 | 31.6 | FC 5 | FC 5 | FC 5 | 31.8 | FC 5 | FC 5 | 30.3 | | | | | | |
| 16765 | 29.8 | 32.3 | 28.9 | 29.9 | MC 5 | MC 5 | MC 5 | MS | FC 5 | FC 5 | 28.2 | 29.4 | 28.9 | 28.6 | | | | | | |
| 16767 | MC 5 | 35.0 | MC 5 | 35.0 | MC 5 | 34.0 | MC 5 | 26.0 | 34.0 | FC 5 | 34.0 | 35.0 | FC 5 | 35.0 | FC 5 | | | | | |
| 16768 | 39.6 | MC 5 | 37.0 | 33.3 | 35.4 | MC 5 | MC 5 | MC 5 | MC 5 | FC 5 | FC 5 | 33.6 | 28.4 | FC 5 | 31.9 | 33.6 | | | | |
| 16769 | MC 5 | MC 5 | 34.7 | MC 5 | MC 5 | 32.4 | MC 5 | MC 5 | 34.6 | 21.5 | FC 5 | 31.5 | 31.1 | 29.6 | FC 5 | 24.6 | | | | |
| 16770 | 35.6 | MC 5 | MC 5 | 35.0 | 35.9 | 34.3 | MC 5 | 31.9 | FC 5 | FC 5 | FC 5 | FC 5 | 34.1 | 35.3 | 31.0 | | | | | |
| 16771 | 31.8 | MC 5 | MC 5 | MC 5 | 35.1 | 33.8 | 32.9 | 32.2 | 31.2 | FC 5 | 31.8 | FC 5 | FC 5 | 28.9 | | | | | | |
| 16773 | 33.5 | 29.4 | 31.4 | 35.2 | FC 5 | FC 5 | FC 5 | FC 5 | 30.7 | 30.2 | FC 5 | FC 5 | 34.2 | FC 5 | 32.7 | | | | | |
| 16774 | MC 5 | 29.9 | 28.9 | 28.8 | 30.0 | MC 5 | FC 5 | FC 5 | 30.0 | 29.4 | FC 5 | 27.0 | 28.7 | | | | | | | |
| 16776 | MC 5 | 29.1 | 29.5 | MC 5 | 26.4 | MC 5 | MC 5 | 27.3 | MC 5 | MD 2 | 29.3 | FC 5 | 28.1 | FC 5 | 26.8 | 29.7 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 23): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | | LACTATION DAY 14 | | | | | | |
| 16781 | MC 5 | 30.8 | 31.7 | MC 5 | 31.3 | 24.0 | 30.9 | FC 5 | FC 5 | FC 5 | 25.3 | 31.0 | 25.4 | FC 5 | | | | | | |
| 16782 | MC 5 | 33.0 | 32.0 | 35.0 | 35.0 | MC 5 | MC 5 | MC 5 | MC 5 | 35.0 | FC 5 | 32.0 | 33.0 | FC 5 | FC 5 | 34.0 | FC 5 | | | |
| 16783 | 33.3 | MC 5 | 33.3 | MC 5 | 34.5 | MC 5 | 30.4 | 30.7 | FC 5 | 31.1 | FC 5 | FC 5 | 32.2 | FC 5 | FC 5 | 29.8 | FC 5 | | | |
| 16784 | 30.0 | MC 5 | MC 5 | 32.0 | MC 5 | 21.0 | 32.0 | FC 5 | 32.0 | 28.0 | 31.0 | 31.0 | | | | | | | | |
| 16786 | 31.0 | 33.0 | 30.0 | FC 5 | 30.0 | 30.0 | FC 5 | FC 5 | FC 5 | 31.0 | 33.0 | 31.0 | FC 5 | FC 5 | | | | | | |
| 16787 | 30.4 | 25.2 | 30.5 | MC 5 | MC 5 | MC 5 | 30.2 | 29.3 | FC 5 | 27.3 | 30.5 | FC 5 | 30.0 | FC 5 | FC 5 | FC 5 | | | | |
| 16791 | MC 5 | MC 5 | 34.4 | 31.7 | 32.3 | 31.0 | 30.7 | 29.9 | 31.5 | FC 5 | 31.4 | | | | | | | | | |
| 16792 | 30.0 | 29.0 | MC 5 | 29.0 | 27.0 | MC 5 | 28.0 | FC 5 | 21.0 | 28.0 | FM 7 | FC 5 | FC 5 | | | | | | | |
| 16793 | 32.5 | 30.7 | MC 5 | 32.7 | 31.1 | MC 5 | 32.2 | FC 5 | 30.4 | 30.7 | 29.6 | | | | | | | | | |
| 16794 | 29.7 | MC 5 | MC 5 | MC 5 | 28.5 | 27.4 | 29.6 | MC 5 | 26.6 | 27.9 | FC 5 | 26.6 | FC 5 | 28.6 | FC 5 | FC 5 | | | | |
| 16795 | MC 5 | MC 5 | MC 5 | 32.9 | 33.4 | MC 5 | 31.8 | MC 5 | MC 5 | 32.8 | 32.0 | 30.4 | FC 5 | FC 5 | 31.0 | FC 5 | 25.0 | FD 1 | | |
| 16796 | MC 5 | MC 5 | MC 5 | 31.0 | 30.0 | 31.0 | 29.0 | 30.0 | 28.0 | 25.0 | 30.0 | | | | | | | | | |
| 16797 | MC 5 | MC 5 | 29.2 | 30.8 | MC 5 | 29.5 | MC 5 | MC 5 | MC 5 | MC 5 | 28.9 | FC 7 | 25.0 | 25.0 | 27.6 | 28.4 | | | | |
| 16798 | MC 5 | MC 5 | 23.3 | MC 5 | MC 5 | 34.4 | 25.8 | 34.7 | FC 5 | 18.1 | 24.6 | 31.5 | FC 5 | 32.6 | FM 3 | | | | | |
| 16799 | MC 5 | MC 5 | MC 5 | MC 5 | 31.9 | 30.9 | 32.3 | MC 5 | 33.7 | 34.3 | FC 5 | 31.3 | 34.1 | FC 5 | 31.8 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 24): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 14 | | | | | | |
| 16800 | MC 5 | MC 5 | MC 5 | 29.7 | 29.0 | 26.8 | 20.0 | 28.5 | 28.0 | 26.2 | 28.1 | FC 5 | FC 5 | | | | | | | |
| 16801 | 33.0 | 34.0 | MC 5 | MC 5 | 30.0 | 32.0 | 29.0 | 32.0 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 24.0 | FC 5 | 33.0 | | |
| 16802 | MC 5 | 30.6 | 27.0 | 31.2 | 29.1 | 29.5 | FC 5 | FC 5 | 28.3 | FC 5 | 24.1 | FC 5 | FC 5 | 28.9 | FD 3 | | | | | |
| 16803 | 35.3 | 36.1 | 33.5 | 32.8 | 31.3 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 33.3 | FC 5 | 34.1 | FC 5 | 31.8 | | | | |
| 16805 | 33.2 | MC 5 | MC 5 | 34.2 | MC 5 | 32.9 | 33.9 | MC 5 | MC 5 | MS | 32.4 | 31.5 | 31.2 | 32.5 | FC 5 | UU | | | | |
| 16806 | 30.0 | 30.0 | 32.0 | MC 5 | 30.0 | FC 5 | FC 5 | FM 2 | 30.0 | FC 5 | FC 5 | 31.0 | 29.0 | FC 5 | 27.0 | | | | | |
| 16807 | MC 5 | MC 5 | MC 5 | 25.7 | MC 5 | 29.2 | 26.5 | 25.1 | MC 5 | 23.6 | FC 5 | 27.0 | 28.7 | FC 5 | 30.9 | FC 5 | | | | |
| 16808 | MC 5 | 28.5 | 30.3 | 27.1 | 27.5 | MC 5 | 27.5 | FC 5 | 26.1 | 29.0 | FC 5 | FC 5 | 26.8 | | | | | | | |
| 16810 | 30.7 | MC 5 | 29.8 | MC 5 | 30.4 | 29.7 | FC 5 | 28.4 | 29.2 | 27.6 | 29.1 | FC 5 | FC 5 | FD 4 | FS | | | | | |
| 16811 | MC 5 | 27.3 | 30.0 | MC 5 | 30.0 | MC 5 | 27.8 | MC 5 | 31.6 | FC 5 | FC 5 | 26.9 | 32.2 | 25.2 | FC 5 | | | | | |
| 16814 | 35.5 | MC 5 | MC 5 | 32.0 | 32.8 | 35.7 | MC 5 | FC 5 | 33.3 | 33.2 | FC 5 | 35.0 | 32.2 | FC 5 | | | | | | |
| 16815 | 36.0 | MC 5 | MC 5 | MC 5 | 37.0 | MC 5 | 35.0 | 33.0 | 34.0 | 34.0 | FC 5 | FC 5 | 34.0 | FC 5 | 35.0 | | | | | |
| 16817 | 31.0 | MC 5 | 32.4 | MC 5 | 33.9 | MC 5 | 32.2 | MC 5 | MC 5 | MM 2 | MM 2 | FC 5 | FC 5 | 31.4 | 33.8 | 16.1 | 15.8 | | | |
| 16818 | MC 5 | MC 5 | MC 5 | 34.5 | MC 5 | 32.5 | 32.4 | 34.5 | 32.9 | 31.4 | FC 5 | FC 5 | 33.0 | 32.3 | FC 5 | | | | | |
| 16820 | 34.1 | 31.6 | MC 5 | MC 5 | 29.1 | MC 5 | 31.0 | 33.0 | 29.9 | 31.8 | FC 5 | 32.8 | FC 5 | FS | | | | | | |
| 16822 | MC 5 | 32.4 | 34.0 | 32.2 | 33.8 | FC 5 | FC 5 | FC 5 | 30.0 | FC 5 | 28.7 | 35.5 | 33.8 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 25): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | LACTATION DAY 14 | | | | | | |
| 16823 | 26.7 | MC 5 | 27.3 | 26.9 | MC 5 | 26.8 | FC 5 | 23.8 | 26.9 | FC 5 | 28.7 | FC 5 | 26.7 | FC 5 | | | | | | |
| 16825 | MC 5 | MC 5 | 30.1 | MC 5 | 30.7 | MC 5 | 29.4 | MC 5 | 30.0 | 30.6 | 29.7 | 28.6 | 28.2 | FC 5 | FC 5 | | | | | |
| 16826 | 34.4 | MC 5 | 35.1 | MC 5 | MC 5 | MC 5 | 36.0 | MC 5 | MC 5 | 35.4 | MD 4 | 35.2 | 34.8 | 33.6 | 33.9 | FC 5 | FC 5 | FD 1 | | |
| 16827 | MC 5 | MC 5 | 30.5 | 30.0 | 28.2 | MC 5 | MC 5 | 30.4 | 29.9 | FC 5 | 30.8 | 27.6 | FC 5 | 29.6 | FD 3 | | | | | |
| 16828 | 34.0 | 33.6 | 35.9 | 33.2 | MC 5 | MC 5 | FC 5 | FC 5 | 32.2 | FC 5 | 33.5 | FC 5 | FC 5 | 34.1 | FC 5 | 32.2 | | | | |
| 16830 | 34.0 | MC 5 | 35.0 | 33.0 | MC 5 | 32.0 | FC 5 | FC 5 | 32.0 | FC 5 | FC 5 | 33.0 | 33.0 | 32.0 | | | | | | |
| 16831 | 30.2 | MC 5 | 31.3 | 32.7 | 32.2 | MD 1 | FC 5 | FC 5 | 30.1 | FC 5 | FC 5 | 30.9 | FC 5 | FC 5 | 31.9 | FC 5 | 32.6 | | | |
| 16833 | MC 5 | 27.4 | 28.3 | 23.3 | MC 5 | MC 5 | 30.3 | MC 5 | MC 5 | 26.7 | FC 5 | FC 5 | 27.9 | 26.1 | FC 5 | 27.1 | FC 5 | | | |
| 16834 | 30.5 | 31.1 | MC 5 | 30.5 | MC 5 | MC 5 | MC 5 | MC 5 | 26.3 | 28.6 | 28.9 | FC 5 | 27.6 | FC 5 | FC 5 | 28.6 | FC 5 | | | |
| 16836 | MC 5 | 35.0 | 36.0 | 36.9 | MC 5 | MC 5 | 36.1 | MS | MS | FC 5 | 36.0 | 34.7 | 34.9 | 35.4 | FC 5 | FC 5 | FS | | | |
| 16837 | 32.5 | MC 5 | 30.5 | MC 5 | MC 5 | MC 5 | 31.0 | MC 5 | MC 5 | 28.7 | FC 5 | 25.9 | 25.0 | 28.1 | FC 5 | FC 5 | FC 5 | 29.6 | FC 5 | FD 4 |
| 16839 | 24.7 | MC 5 | 25.9 | 24.5 | 23.0 | MC 5 | MC 5 | MC 5 | 27.0 | 19.5 | 23.5 | 23.8 | FC 5 | | | | | | | |
| 16840 | 37.1 | MC 5 | MC 5 | MC 5 | 38.6 | 36.0 | MC 5 | 37.2 | 36.1 | 30.5 | FC 5 | 36.8 | 37.1 | | | | | | | |
| 16842 | MC 5 | MC 5 | 39.1 | 37.0 | 36.6 | MC 5 | 36.8 | MC 5 | 34.8 | 35.6 | 36.0 | FC 5 | 37.6 | FC 5 | | | | | | |
| 16843 | 35.3 | MC 5 | 33.5 | MD 8 | 27.5 | FC 5 | FC 5 | FC 5 | 33.8 | FC 5 | 30.8 | 34.7 | 32.7 | FC 5 | FC 5 | | | | | |
| 16844 | 33.0 | MC 5 | MC 5 | MC 5 | MC 5 | 35.4 | 33.8 | 31.8 | MC 5 | 35.8 | FC 5 | 34.3 | 33.0 | FC 5 | 34.2 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 26): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | LACTATION DAY 22 | | | | | | | |
| 16731 | MC 5 | 48.5 | MC 5 | 49.4 | 39.9 | MC 5 | 46.8 | MC 5 | 48.1 | 43.1 | 43.1 | 45.3 | | | | | | | | |
| 16732 | 44.1 | 46.5 | 49.9 | 50.2 | FC 5 | FC 5 | 49.6 | 48.3 | FC 5 | 50.5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 48.6 | FC 5 | FC 5 | | |
| 16734 | MC 5 | 56.7 | 56.8 | MC 5 | 57.9 | 60.4 | 59.4 | 57.5 | FC 5 | 56.2 | FC 5 | 58.1 | FC 5 | FC 5 | | | | | | |
| 16735 | MC 5 | MC 5 | MC 5 | 53.1 | MC 5 | MC 5 | 50.3 | 54.1 | 45.9 | FC 5 | 44.4 | 54.0 | 49.3 | FC 5 | 55.1 | | | | | |
| 16736 | 43.3 | 35.0 | 33.3 | MC 5 | MC 5 | 34.0 | MC 5 | MC 5 | MC 5 | 35.5 | 30.6 | 39.7 | FC 5 | 37.6 | | | | | | |
| 16737 | MC 5 | 43.3 | 49.4 | 51.5 | MC 5 | MC 5 | 58.0 | 47.2 | 53.0 | 46.0 | FC 5 | 47.9 | FC 5 | FC 5 | FC 5 | FD 2 | | | | |
| 16738 | MC 5 | 57.6 | 59.0 | MC 5 | MC 5 | MC 5 | 55.2 | 56.3 | 57.1 | MC 5 | 54.3 | 54.9 | 47.6 | FD 2 | | | | | | |
| 16740 | 37.6 | 45.0 | 43.4 | 37.8 | MS | FC 5 | FC 5 | 41.2 | FC 5 | FC 5 | 39.9 | FC 5 | FC 5 | 41.8 | FC 5 | 30.0 | FC 5 | | | |
| 16741 | 41.8 | MC 5 | MC 5 | 46.4 | 47.5 | MC 5 | 42.6 | 41.7 | FC 5 | 43.2 | 40.9 | 43.2 | FC 5 | FC 5 | FC 5 | | | | | |
| 16742 | MC 5 | MC 5 | MC 5 | 53.0 | 54.2 | 49.3 | 53.1 | MC 5 | MC 5 | MC 5 | 45.0 | 50.5 | FC 5 | 48.3 | 52.7 | FS | | | | |
| 16745 | 45.6 | MC 5 | MC 5 | 49.2 | MC 5 | MC 5 | MC 5 | 42.7 | 56.6 | 4.8 | FC 5 | 53.7 | FC 5 | FC 5 | 47.1 | 43.5 | | | | |
| 16746 | MC 5 | MC 5 | 37.2 | MC 5 | 41.2 | 36.7 | 38.5 | FC 5 | FC 5 | 34.9 | FC 5 | FC 5 | 33.7 | 35.5 | FD13 | | | | | |
| 16747 | 51.9 | MC 5 | 53.5 | 53.6 | 50.4 | 48.5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 52.0 | 46.5 | 48.7 | | | | | |
| 16749 | MC 5 | MC 5 | 48.3 | 52.3 | MC 5 | 47.5 | MC 5 | 40.6 | MC 5 | MC 5 | 45.9 | FC 5 | 42.6 | 40.5 | 43.6 | FC 5 | | | | |
| 16750 | MC 5 | MC 5 | MC 5 | 58.1 | 52.1 | 54.7 | 45.9 | 47.9 | FC 5 | FC 5 | FC 5 | 51.8 | 53.5 | 54.6 | FC 5 | FC 5 | | | | |
| 16753 | MC 5 | MC 5 | 43.0 | 45.3 | 47.5 | MC 5 | MC 5 | MC 5 | 45.2 | 44.7 | 44.4 | 47.1 | FC 5 | 47.8 | FD 1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 27): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | 0.01 MG/KG/DAY | | | | | | | LACTATION DAY 22 | | | | | | |
| 16755 | 60.3 | 51.5 | MC 5 | 46.4 | 44.9 | FC 5 | FC 5 | 51.1 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 52.1 | 53.4 | 43.4 | | | |
| 16758 | 44.0 | MC 5 | 44.5 | MC 5 | 53.0 | 55.0 | FC 5 | FC 5 | 42.8 | 58.9 | FC 5 | FC 5 | 44.0 | 34.9 | | | | | | |
| 16760 | 49.1 | 60.4 | MC 5 | 56.2 | MC 5 | MC 5 | 53.8 | MC 5 | MC 5 | MC 5 | 48.7 | 42.4 | 47.3 | 41.2 | | | | | | |
| 16761 | MC 5 | MC 5 | 52.0 | MC 5 | 56.7 | 53.5 | 46.4 | 52.1 | 55.3 | FC 5 | 42.3 | 44.4 | | | | | | | | |
| 16762 | MC 5 | 46.0 | MC 5 | MC 5 | 47.5 | 47.7 | 46.0 | 45.1 | 45.3 | 41.7 | 46.2 | FC 5 | FC 5 | FC 5 | | | | | | |
| 16763 | MC 5 | 63.4 | 56.9 | 61.6 | 60.1 | MC 5 | MC 5 | MC 5 | MS | 60.4 | FC 5 | 55.4 | 57.8 | 60.1 | FC 5 | | | | | |
| 16764 | 53.9 | 56.1 | 54.4 | 54.8 | 53.8 | FC 5 | 52.0 | FC 5 | FC 5 | FC 5 | 54.6 | FC 5 | FC 5 | 56.2 | | | | | | |
| 16765 | 50.5 | 49.4 | 54.1 | 46.8 | MC 5 | MC 5 | MC 5 | MS | FC 5 | FC 5 | 47.3 | 50.1 | 45.9 | 48.0 | | | | | | |
| 16767 | MC 5 | 57.8 | MC 5 | 58.8 | MC 5 | 61.7 | MC 5 | 47.1 | 59.2 | FC 5 | 58.4 | 58.0 | FC 5 | 59.0 | FC 5 | | | | | |
| 16768 | 59.3 | MC 5 | 65.0 | 61.7 | 60.8 | MC 5 | MC 5 | MC 5 | MC 5 | FC 5 | FC 5 | 58.1 | 54.5 | FC 5 | 58.1 | 52.5 | | | | |
| 16769 | MC 5 | MC 5 | 60.1 | MC 5 | MC 5 | 58.4 | MC 5 | MC 5 | 54.1 | 38.6 | FC 5 | 50.3 | 53.2 | 57.1 | FC 5 | 43.7 | | | | |
| 16770 | 56.0 | MC 5 | MC 5 | 60.8 | 58.9 | 57.0 | MC 5 | 53.2 | FC 5 | FC 5 | FC 5 | FC 5 | 56.5 | 56.4 | 56.0 | | | | | |
| 16771 | 58.8 | MC 5 | MC 5 | MC 5 | 59.6 | 52.7 | 56.5 | 50.3 | 57.1 | FC 5 | 54.4 | FC 5 | FC 5 | 54.1 | | | | | | |
| 16773 | 49.3 | 51.6 | 45.6 | 52.1 | FC 5 | FC 5 | FC 5 | FC 5 | 46.4 | 54.1 | FC 5 | FC 5 | 49.5 | FC 5 | 49.7 | | | | | |
| 16774 | MC 5 | 50.6 | 53.8 | 51.0 | 46.8 | MC 5 | FC 5 | FC 5 | 50.5 | 52.9 | FC 5 | 50.5 | 44.7 | | | | | | | |
| 16776 | MC 5 | 49.4 | 44.9 | MC 5 | 48.0 | MC 5 | MC 5 | 52.9 | MC 5 | MD 2 | 49.3 | FC 5 | 46.8 | FC 5 | 52.0 | 48.1 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 28): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | 0.1 MG/KG/DAY | | | | | | LACTATION DAY 22 | | | | | | | |
| 16781 | MC 5 | 52.8 | 52.7 | MC 5 | 49.3 | 39.6 | 47.8 | FC 5 | FC 5 | FC 5 | 41.5 | 53.0 | 40.8 | FC 5 | | | | | | |
| 16782 | MC 5 | 56.0 | 59.8 | 61.5 | 59.8 | MC 5 | MC 5 | MC 5 | MC 5 | 57.5 | FC 5 | 55.8 | 59.0 | FC 5 | FC 5 | 62.0 | FC 5 | | | |
| 16783 | 50.7 | MC 5 | 58.5 | MC 5 | 57.2 | MC 5 | 57.1 | 47.3 | FC 5 | 53.8 | FC 5 | FC 5 | 50.9 | FC 5 | FC 5 | 53.0 | FC 5 | | | |
| 16784 | 59.7 | MC 5 | MC 5 | 55.6 | MC 5 | 59.0 | 37.7 | FC 5 | 59.7 | 57.2 | 59.5 | 51.8 | | | | | | | | |
| 16786 | 48.7 | 49.9 | 53.0 | FC 5 | 46.9 | 54.9 | FC 5 | FC 5 | FC 5 | 44.4 | 49.3 | 47.8 | FC 5 | FC 5 | | | | | | |
| 16787 | 53.1 | 55.0 | 47.5 | MC 5 | MC 5 | MC 5 | 52.9 | 51.2 | FC 5 | 52.1 | 45.6 | FC 5 | 54.0 | FC 5 | FC 5 | FC 5 | | | | |
| 16791 | MC 5 | MC 5 | 52.0 | 55.3 | 55.6 | 55.0 | 53.9 | 49.6 | 51.6 | FC 5 | 51.9 | | | | | | | | | |
| 16792 | 47.5 | 48.6 | MC 5 | 45.6 | 49.0 | MC 5 | 34.8 | FC 5 | 47.2 | 46.6 | FM 7 | FC 5 | FC 5 | | | | | | | |
| 16793 | 54.0 | 50.6 | MC 5 | 49.7 | 56.0 | MC 5 | 53.7 | FC 5 | 52.3 | 50.7 | 52.2 | | | | | | | | | |
| 16794 | 48.3 | MC 5 | MC 5 | MC 5 | 44.8 | 49.3 | 50.2 | MC 5 | 49.0 | 46.2 | FC 5 | 44.6 | FC 5 | 48.1 | FC 5 | FC 5 | | | | |
| 16795 | MC 5 | MC 5 | MC 5 | 52.0 | 55.7 | MC 5 | 52.2 | MC 5 | MC 5 | 52.6 | 47.2 | 49.9 | FC 5 | FC 5 | 50.7 | FC 5 | 51.2 | FD 1 | | |
| 16796 | MC 5 | MC 5 | MC 5 | 51.0 | 48.0 | 47.4 | 46.7 | 48.1 | 41.8 | 47.2 | 45.6 | | | | | | | | | |
| 16797 | MC 5 | MC 5 | 49.8 | 53.6 | MC 5 | 50.3 | MC 5 | MC 5 | MC 5 | MC 5 | 51.2 | FC 7 | 50.4 | 43.1 | 42.0 | 48.7 | | | | |
| 16798 | MC 5 | MC 5 | 55.4 | MC 5 | MC 5 | 43.3 | 55.5 | 44.7 | FC 5 | 54.3 | 35.5 | 45.8 | FC 5 | 49.8 | FM 3 | | | | | |
| 16799 | MC 5 | MC 5 | MC 5 | MC 5 | 57.0 | 56.0 | 60.4 | MC 5 | 55.1 | 56.0 | FC 5 | 58.9 | 60.1 | FC 5 | 55.1 | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 29): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | 1.0 MG/KG/DAY | | | | | | | LACTATION DAY 22 | | | | | | |
| 16800 | MC 5 | MC 5 | MC 5 | 43.6 | 48.0 | 31.6 | 47.1 | 43.6 | 42.6 | 44.0 | 47.0 | FC 5 | FC 5 | | | | | | | |
| 16801 | 55.5 | 50.2 | MC 5 | MC 5 | 52.7 | 50.6 | 53.8 | 42.6 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 49.7 | FC 5 | 51.3 | | |
| 16802 | MC 5 | 53.0 | 52.0 | 55.1 | 48.9 | 50.6 | FC 5 | FC 5 | 52.6 | FC 5 | 42.2 | FC 5 | FC 5 | 45.7 | FD 3 | | | | | |
| 16803 | 49.7 | 47.3 | 48.6 | 51.8 | 45.6 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | 48.6 | FC 5 | 52.5 | FC 5 | 46.3 | | | | |
| 16805 | 55.4 | MC 5 | MC 5 | 53.5 | MC 5 | 58.2 | 57.9 | MC 5 | MC 5 | MS | 52.2 | 54.8 | 47.9 | 49.4 | FC 5 | UU | | | | |
| 16806 | 52.7 | 52.4 | 54.2 | MC 5 | 54.6 | FC 5 | FC 5 | FM 2 | 50.8 | FC 5 | FC 5 | 50.4 | 54.6 | FC 5 | 52.6 | | | | | |
| 16807 | MC 5 | MC 5 | MC 5 | 46.7 | MC 5 | 46.7 | 50.8 | 47.2 | MC 5 | 42.1 | FC 5 | 50.9 | 48.6 | FC 5 | 53.2 | FC 5 | | | | |
| 16808 | MC 5 | 49.8 | 42.0 | 47.3 | 47.7 | MC 5 | 41.7 | FC 5 | 46.0 | 47.0 | FC 5 | FC 5 | 44.9 | | | | | | | |
| 16810 | 54.6 | MC 5 | 55.1 | MC 5 | 53.4 | 51.9 | FC 5 | 49.6 | 52.0 | 53.0 | 46.8 | FC 5 | FC 5 | FD 4 | FS | | | | | |
| 16811 | MC 5 | 50.8 | 50.6 | MC 5 | 49.1 | MC 5 | 48.6 | MC 5 | 42.9 | FC 5 | FC 5 | 46.6 | 52.2 | 54.4 | FC 5 | | | | | |
| 16814 | 57.8 | MC 5 | MC 5 | 54.0 | 53.0 | 54.4 | MC 5 | FC 5 | 52.2 | 49.5 | FC 5 | 54.3 | 55.3 | FC 5 | | | | | | |
| 16815 | 60.5 | MC 5 | MC 5 | MC 5 | 60.4 | MC 5 | 56.5 | 55.0 | 56.0 | 58.2 | FC 5 | FC 5 | 58.1 | FC 5 | 56.3 | | | | | |
| 16817 | 54.2 | MC 5 | 56.1 | MC 5 | 54.0 | MC 5 | 53.5 | MC 5 | MC 5 | MM 2 | MM 2 | FC 5 | FC 5 | 55.0 | 59.4 | 26.1 | 27.8 | | | |
| 16818 | MC 5 | MC 5 | MC 5 | 59.0 | MC 5 | 54.0 | 56.0 | 55.7 | 51.0 | 54.1 | FC 5 | FC 5 | 53.5 | 53.9 | FC 5 | | | | | |
| 16820 | 55.1 | 47.8 | MC 5 | MC 5 | 50.3 | MC 5 | 53.4 | 53.3 | 55.1 | 44.1 | FC 5 | 52.4 | FC 5 | FS | | | | | | |
| 16822 | MC 5 | 54.7 | 56.1 | 57.7 | 54.5 | FC 5 | FC 5 | FC 5 | 58.2 | FC 5 | 48.2 | 60.1 | 48.2 | | | | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D41 (PAGE 30): PUP BODY WEIGHTS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 21 | 22 | 23 | | | | | | | | | | | | | | | | | |
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | 30.0 MG/KG/DAY | | | | | | | LACTATION DAY 22 | | | | | | |
| 16823 | 46.5 | MC 5 | 44.9 | 43.6 | MC 5 | 46.7 | FC 5 | 50.9 | 41.1 | FC 5 | 46.5 | FC 5 | 46.6 | FC 5 | | | | | | |
| 16825 | MC 5 | MC 5 | 49.5 | MC 5 | 539.0 | MC 5 | 50.0 | MC 5 | 52.0 | 48.5 | 49.4 | 47.1 | 49.3 | FC 5 | FC 5 | | | | | |
| 16826 | 53.4 | MC 5 | 55.5 | MC 5 | MC 5 | MC 5 | 55.2 | MC 5 | MC 5 | 55.0 | MD 4 | 51.9 | 58.2 | 54.8 | 55.0 | FC 5 | FC 5 | FD 1 | | |
| 16827 | MC 5 | MC 5 | 52.8 | 51.1 | 57.4 | MC 5 | MC 5 | 52.8 | 53.4 | FC 5 | 51.2 | 45.7 | FC 5 | 51.1 | FD 3 | | | | | |
| 16828 | 60.3 | 61.6 | 62.0 | 60.4 | MC 5 | MC 5 | FC 5 | FC 5 | 59.3 | FC 5 | 60.7 | FC 5 | FC 5 | 53.4 | FC 5 | 56.9 | | | | |
| 16830 | 59.7 | MC 5 | 56.2 | 57.1 | MC 5 | 54.2 | FC 5 | FC 5 | 54.6 | FC 5 | FC 5 | 53.5 | 54.0 | 54.0 | | | | | | |
| 16831 | 47.5 | MC 5 | 51.1 | 48.6 | 52.5 | MD 1 | FC 5 | FC 5 | 49.9 | FC 5 | FC 5 | 56.2 | FC 5 | FC 5 | 54.4 | FC 5 | 50.2 | | | |
| 16833 | MC 5 | 49.5 | 53.2 | 50.7 | MC 5 | MC 5 | 45.0 | MC 5 | MC 5 | 49.9 | FC 5 | FC 5 | 50.6 | 46.6 | FC 5 | 49.0 | FC 5 | | | |
| 16834 | 53.0 | 53.6 | MC 5 | 47.6 | MC 5 | MC 5 | MC 5 | MC 5 | 53.7 | 48.3 | 51.5 | FC 5 | 48.7 | FC 5 | FC 5 | 48.0 | FC 5 | | | |
| 16836 | MC 5 | 62.5 | 56.1 | 56.3 | MC 5 | MC 5 | 56.9 | MS | MS | FC 5 | 55.5 | 57.4 | 58.2 | 58.2 | FC 5 | FC 5 | FS | | | |
| 16837 | 58.2 | MC 5 | 54.2 | MC 5 | MC 5 | MC 5 | 56.5 | MC 5 | MC 5 | 46.7 | FC 5 | 44.9 | 47.2 | 51.8 | FC 5 | FC 5 | FC 5 | 50.8 | FC 5 | FD 4 |
| 16839 | 38.4 | MC 5 | 45.3 | 43.4 | 43.4 | MC 5 | MC 5 | MC 5 | 47.4 | 43.2 | 41.7 | 37.6 | FC 5 | | | | | | | |
| 16840 | 69.0 | MC 5 | MC 5 | MC 5 | 66.7 | 68.5 | MC 5 | 72.4 | 51.6 | 64.7 | FC 5 | 63.5 | 66.1 | | | | | | | |
| 16842 | MC 5 | MC 5 | 66.7 | 62.5 | 62.0 | MC 5 | 62.2 | MC 5 | 59.1 | 59.8 | 59.9 | FC 5 | 61.5 | FC 5 | | | | | | |
| 16843 | 55.5 | MC 5 | 56.3 | MD 8 | 46.9 | FC 5 | FC 5 | FC 5 | 56.1 | FC 5 | 54.8 | 48.2 | 54.0 | FC 5 | FC 5 | | | | | |
| 16844 | 56.8 | MC 5 | MC 5 | MC 5 | MC 5 | 62.0 | 54.4 | 60.8 | MC 5 | 53.9 | FC 5 | 61.8 | 57.5 | FC 5 | 61.3 | FC 5 | | | | |

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.
FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D42 (PAGE 1): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION FEMALE PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP I | | | | | | | | 0 (CARRIER) MG/KG/DAY | | | | | | | | | | | | | | |
| 16731 | MC 5 | M A | MC 5 | M A | M A | MC 5 | M A | MC 5 | F A | F A | F A | F A | | | | | | | | | | | |
| 16732 | M A | M A | M A | M A | FC 5 | FC 5 | F A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | | | | | |
| 16734 | MC 5 | M A | M A | MC 5 | M A | M A | F A | F A | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | | | | | | | | | |
| 16735 | MC 5 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | FC 5 | F A | F A | F A | FC 5 | F A | | | | | | | | |
| 16736 | M A | M A | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | MC 5 | F A | F A | F A | FC 5 | F A | | | | | | | | | |
| 16737 | MC 5 | M A | M A | M A | MC 5 | MC 5 | M A | F A | F A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | FD 2 | | | | | | | |
| 16738 | MC 5 | M A | M A | MC 5 | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | F A | F A | FD 2 | | | | | | | | | |
| 16740 | M A | M A | M A | M A | M S | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | | | | | | |
| 16741 | M A | MC 5 | MC 5 | M A | M A | MC 5 | M A | F A | FC 5 | F A | F A | F A | FC 5 | FC 5 | FC 5 | | | | | | | | |
| 16742 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | MC 5 | MC 5 | MC 5 | F A | F A | FC 5 | F A | F A | F S | | | | | | | |
| 16745 | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | M A | F A | FC 5 | F A | FC 5 | FC 5 | F A | F A | | | | | | | |
| 16746 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | FD13 | | | | | | | | |
| 16747 | M A | MC 5 | M A | M A | M A | F A | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | F A | F A | F A | | | | | | | | |
| 16749 | MC 5 | MC 5 | M A | M A | MC 5 | M A | MC 5 | M A | MC 5 | MC 5 | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | | |
| 16750 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | F A | FC 5 | FC 5 | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | |
| 16753 | MC 5 | MC 5 | M A | M A | M A | MC 5 | MC 5 | MC 5 | M A | F A | F A | F A | FC 5 | F A | FD 1 | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED), X-OTHER
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D42 (PAGE 2): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION FEMALE PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP II | | | | | | | | 0.01 MG/KG/DAY | | | | | | | | | | | | | | |
| 16755 | M A | M A | MC 5 | M A | M A | FC 5 | FC 5 | F A | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | F A | F A | F A | | | | | | |
| 16758 | M A | MC 5 | M A | MC 5 | M A | M A | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | F A | | | | | | | | | |
| 16760 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | MC 5 | F A | F A | F A | F A | | | | | | | | | |
| 16761 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | F A | F A | FC 5 | F A | F A | | | | | | | | | | | |
| 16762 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | F A | F A | F A | F A | FC 5 | FC 5 | FC 5 | | | | | | | | | |
| 16763 | MC 5 | M A | M A | M A | M A | MC 5 | MC 5 | MC 5 | M S | F A | FC 5 | F A | F A | F A | FC 5 | | | | | | | | |
| 16764 | M A | M A | M A | M A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | | | | | | | | | |
| 16765 | M A | M A | M A | M A | MC 5 | MC 5 | MC 5 | M S | FC 5 | FC 5 | F A | F A | F A | F A | | | | | | | | | |
| 16767 | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | F A | FC 5 | F A | F A | FC 5 | F A | FC 5 | | | | | | | | |
| 16768 | M A | MC 5 | M A | M A | M A | MC 5 | MC 5 | MC 5 | MC 5 | FC 5 | FC 5 | F A | F A | FC 5 | F A | F A | | | | | | | |
| 16769 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | FC 5 | F A | F A | F A | FC 5 | F A | | | | | | | |
| 16770 | M A | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | FC 5 | FC 5 | FC 5 | FC 5 | F A | F A | F A | | | | | | | | |
| 16771 | M A | MC 5 | MC 5 | MC 5 | M A | M A | M A | F A | F A | FC 5 | F A | FC 5 | FC 5 | F A | | | | | | | | | |
| 16773 | M A | M A | M A | M A | FC 5 | FC 5 | FC 5 | FC 5 | F A | F A | FC 5 | FC 5 | F A | FC 5 | F A | | | | | | | | |
| 16774 | MC 5 | M A | M A | M A | M A | MC 5 | FC 5 | FC 5 | F A | F A | FC 5 | F A | F A | | | | | | | | | | |
| 16776 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | MC 5 | MD 2 | F A | FC 5 | F A | FC 5 | F A | F A | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED), X-OTHER
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D42 (PAGE 3): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION FEMALE PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP III | | | | | | | | 0.1 MG/KG/DAY | | | | | | | | | | | | | | |
| 16781 | MC 5 | M A | M A | MC 5 | M A | M A | F A | FC 5 | FC 5 | FC 5 | F A | F A | F A | FC 5 | | | | | | | | | |
| 16782 | MC 5 | M A | M A | M A | M A | MC 5 | MC 5 | MC 5 | MC 5 | F A | FC 5 | F A | F A | FC 5 | FC 5 | F A | FC 5 | | | | | | |
| 16783 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | F A | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | | | | | | |
| 16784 | M A | MC 5 | MC 5 | M A | MC 5 | M A | M A | FC 5 | F A | F A | F A | F A | | | | | | | | | | | |
| 16786 | M A | M A | M A | FC 5 | F A | F A | FC 5 | FC 5 | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | | | |
| 16787 | M A | M A | M A | MC 5 | MC 5 | MC 5 | M A | F A | FC 5 | F A | F A | FC 5 | F A | FC 5 | FC 5 | FC 5 | | | | | | | |
| 16791 | MC 5 | MC 5 | M A | M A | M A | M A | F A | F A | F A | FC 5 | F A | | | | | | | | | | | | |
| 16792 | M A | M A | MC 5 | M A | M A | MC 5 | F A | FC 5 | F A | F A | FM 7 | FC 5 | FC 5 | | | | | | | | | | |
| 16793 | M A | M A | MC 5 | M A | M A | MC 5 | F A | FC 5 | F A | F A | F A | | | | | | | | | | | | |
| 16794 | M A | MC 5 | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | F A | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | | | | | | | |
| 16795 | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | M A | F A | F A | FC 5 | FC 5 | F A | FC 5 | F A | FD 1 | | | | | |
| 16796 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | F A | F A | F A | F A | | | | | | | | | | | | |
| 16797 | MC 5 | MC 5 | M A | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | FC 7 | F A | F A | F A | F A | | | | | | | |
| 16798 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | M A | M A | FC 5 | F A | F A | F A | FC 5 | F A | FM 3 | | | | | | | | |
| 16799 | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | M A | MC 5 | M A | F A | FC 5 | F A | F A | FC 5 | F A | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED), X-OTHER
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D42 (PAGE 4): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION FEMALE PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP IV | | | | | | | | 1.0 MG/KG/DAY | | | | | | | | | | | | | | |
| 16800 | MC 5 | MC 5 | MC 5 | M A | M A | M A | M A | F A | F A | F A | F A | FC 5 | FC 5 | | | | | | | | | | |
| 16801 | M A | M A | MC 5 | MC 5 | M A | M A | F A | F A | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | | | | | |
| 16802 | MC 5 | M A | M A | M A | M A | F A | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | F A | FD 3 | | | | | | | | |
| 16803 | M A | M A | M A | M A | F A | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | F A | | | | | | | |
| 16805 | M A | MC 5 | MC 5 | M A | MC 5 | M A | M A | MC 5 | MC 5 | M S | F A | F A | F A | F A | FC 5 | U U | | | | | | | |
| 16806 | M A | M A | M A | MC 5 | M A | FC 5 | FC 5 | FM 2 | F A | FC 5 | FC 5 | F A | F A | FC 5 | F A | | | | | | | | |
| 16807 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | MC 5 | F A | FC 5 | F A | F A | FC 5 | F A | FC 5 | | | | | | | |
| 16808 | MC 5 | M A | M A | M A | M A | MC 5 | F A | FC 5 | F A | F A | FC 5 | FC 5 | F A | | | | | | | | | | |
| 16810 | M A | MC 5 | M A | MC 5 | M A | M A | FC 5 | F A | F A | F A | F A | FC 5 | FC 5 | FD 4 | F S | | | | | | | | |
| 16811 | MC 5 | M A | M A | MC 5 | M A | MC 5 | M A | MC 5 | F A | FC 5 | FC 5 | F A | F A | F A | FC 5 | | | | | | | | |
| 16814 | M A | MC 5 | MC 5 | M A | M A | M A | MC 5 | FC 5 | F A | F A | FC 5 | F A | F A | FC 5 | | | | | | | | | |
| 16815 | M A | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | M A | F A | F A | FC 5 | FC 5 | F A | FC 5 | F A | | | | | | | | |
| 16817 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | MC 5 | MM 2 | MM 2 | FC 5 | FC 5 | F A | F A | F A | F A | | | | | | |
| 16818 | MC 5 | MC 5 | MC 5 | M A | MC 5 | M A | M A | M A | F A | F A | FC 5 | FC 5 | F A | F A | FC 5 | | | | | | | | |
| 16820 | M A | M A | MC 5 | MC 5 | M A | MC 5 | M A | F A | F A | F A | FC 5 | F A | FC 5 | F S | | | | | | | | | |
| 16822 | MC 5 | M A | M A | M A | M A | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | F A | F A | | | | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED), X-OTHER
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D42 (PAGE 5): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION FEMALE PUPS - PART C

| PUP # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RAT/ LITTER # | DOSAGE GROUP V | | | | | | | | 30.0 MG/KG/DAY | | | | | | | | | | | | | | |
| 16823 | M A | MC 5 | M A | M A | MC 5 | M A | FC 5 | F A | F A | FC 5 | F A | FC 5 | F A | FC 5 | | | | | | | | | |
| 16825 | MC 5 | MC 5 | M A | MC 5 | M A | MC 5 | M A | MC 5 | M A | F A | F A | F A | F A | FC 5 | FC 5 | | | | | | | | |
| 16826 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | MD 4 | F A | F A | F A | F A | FC 5 | FC 5 | FD 1 | | | | | |
| 16827 | MC 5 | MC 5 | M A | M A | M A | MC 5 | MC 5 | M A | F A | FC 5 | F A | F A | FC 5 | F A | FD 3 | | | | | | | | |
| 16828 | M A | M A | M A | M A | MC 5 | MC 5 | FC 5 | FC 5 | F A | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | F A | | | | | | | |
| 16830 | M A | MC 5 | M A | M A | MC 5 | M A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | F A | F A | | | | | | | | | |
| 16831 | M A | MC 5 | M A | M A | M A | MD 1 | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | F A | | | | | | |
| 16833 | MC 5 | M A | M A | M A | MC 5 | MC 5 | M A | MC 5 | MC 5 | F A | FC 5 | FC 5 | F A | F A | FC 5 | F A | FC 5 | | | | | | |
| 16834 | M A | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | F A | F A | FC 5 | F A | FC 5 | FC 5 | F A | FC 5 | | | | | | |
| 16836 | MC 5 | M A | M A | M A | MC 5 | MC 5 | M A | M S | M S | FC 5 | F A | F A | F A | F A | FC 5 | FC 5 | F S | | | | | | |
| 16837 | M A | MC 5 | M A | MC 5 | MC 5 | MC 5 | M A | MC 5 | MC 5 | M A | FC 5 | F A | F A | F A | FC 5 | FC 5 | FC 5 | F A | FC 5 | FD 4 | | | |
| 16839 | M A | MC 5 | M A | M A | M A | MC 5 | MC 5 | MC 5 | F A | F A | F A | F A | FC 5 | | | | | | | | | | |
| 16840 | M A | MC 5 | MC 5 | MC 5 | M A | M A | MC 5 | M A | F A | F A | FC 5 | F A | F A | | | | | | | | | | |
| 16842 | MC 5 | MC 5 | M A | M A | M A | MC 5 | M A | MC 5 | F A | F A | F A | FC 5 | F A | FC 5 | | | | | | | | | |
| 16843 | M A | MC 5 | M A | MD 8 | M A | FC 5 | FC 5 | FC 5 | F A | FC 5 | F A | F A | F A | FC 5 | FC 5 | | | | | | | | |
| 16844 | M A | MC 5 | MC 5 | MC 5 | MC 5 | M A | M A | M A | MC 5 | F A | FC 5 | F A | F A | FC 5 | F A | FC 5 | | | | | | | |

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE
SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, C-CULLED, M-MISSING (PRESUMED CANNIBALIZED), X-OTHER
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D43 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY (S) POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| I<br>0 (CARRIER) | 16740 | 1 | 1/17 PUPS: COLD TO TOUCH; NOT NURSING. |
| | 16753 | 1 | 1/15 PUPS: TAIL, BENT. |
| | | 2-5 | 1/14 PUPS: TAIL, BENT. |
| II<br>0.01 | 16760 | 1-5 | 1/14 PUPS: TIP OF TAIL, MISSING. |
| | | 6-22 | 1/ 8 PUPS: TIP OF TAIL, MISSING.b |
| III<br>0.1 | - | - | - |
| IV<br>1.0 | 16807 | 1-5 | 1/16 PUPS: TIP OF TAIL, BLACK. |
| | 16808 | 1-2 | 1/13 PUPS: LEFT HINDPAW, SWOLLEN. |
| | | 1-4 | 1/13 PUPS: LOWER MIDLINE, DARK AREA |

a. Tabulation restricted to adverse observations; all other pups appeared normal.
b. Observation confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D43 (PAGE 2): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 22 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY (S) POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| V<br>30.0 | 16826 | 2-4 | 1/17 PUPS: BACK, DARK AREA. |
| | | 5 | 1/16 PUPS: BACK, DARK AREA. |
| | 16843 | 8 | 1/ 8 PUPS: BASE OF TAIL, KINKED. |
| | | 9-20 | 1/ 7 PUPS: BASE OF TAIL, KINKED. |

a. Tabulation restricted to adverse observations; all other pups appeared normal.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D44 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| I<br>0 (CARRIER) | 16731 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16732 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16734 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16735 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16736 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16737 | 2 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH. ALL OTHER TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16738 | 2 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16740 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16741 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16742 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16745 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16746 | 13 | 1 PUP: FOUND DEAD. CANNIBALIZATION PRECLUDED FURTHER EVALUATION. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16747 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16749 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16750 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16753 | 1 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH. TAIL, MISSING. ALL OTHER TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table D43) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D44 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| II<br>0.01 | 16755 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16758 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16760 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16761 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16762 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16763 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16764 | 22 | 1 PUP: KIDNEY, RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16765 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16767 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16768 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16769 | 22 | 1 PUP: KIDNEY, RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16770 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16771 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16773 | 22 | 1 PUP: KIDNEY, RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16774 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16776 | 2 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table D43) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D44 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| III | | | |
| 0.1 | 16781 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16782 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16783 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16784 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16786 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16787 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16791 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16792 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16793 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16794 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16795 | 1 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16796 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16797 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16798 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16799 | 22 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table D43) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D44 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| IV | | | |
| 1.0 | 16800 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16801 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16802 | 3 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16803 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16805 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16806 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16807 | 22 | 1 PUP: TIP OF TAIL BLACK. ALL OTHER PUPS APPEARED NORMAL. |
| | 16808 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16810 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 4 | 1 PUP: FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16811 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16814 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16815 | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, SLIGHT DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16817 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16818 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16820 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16822 | 22 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table D43) for external clinical observations confirmed at necropsy.

PROTOCOL 1416-003: HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

TABLE D44 (PAGE 5): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS - PART C

| MATERNAL DOSAGE GROUP<br>MATERNAL DOSAGE (MG/KG/DAY) | LITTER NUMBER | DAY POSTPARTUM | OBSERVATIONS a |
|---|---|---|---|
| V<br>30.0 | 16823 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16825 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16826 | 1 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 4 | 1 PUP: FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION. |
| | | 22 | 1 PUP: KIDNEY: RIGHT, PELVIS, MODERATE DILATION. ALL OTHER PUPS APPEARED NORMAL. |
| | 16827 | 3 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16828 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16830 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16831 | 1 | 1 PUP: FOUND DEAD. NO MILK IN STOMACH. ALL OTHER TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16833 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16834 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16836 | 1 | 1 PUP: STILLBORN. ALL TISSUES APPEARED NORMAL |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16837 | 4 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16839 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16840 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16842 | 22 | ALL PUPS APPEARED NORMAL. |
| | 16843 | 8 | 1 PUP: FOUND DEAD. ALL TISSUES APPEARED NORMAL. |
| | | 22 | ALL PUPS APPEARED NORMAL. |
| | 16844 | 22 | ALL PUPS APPEARED NORMAL. |

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table D43) for external clinical observations confirmed at necropsy.

# APPENDIX E

# PROTOCOL AND AMENDMENTS

PRIMEDICA

Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, PA 19044
Telephone: (215) 443-8710
Telefax: (215) 443-8587

**PROTOCOL 1416-003**

**STUDY TITLE**: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or via Maternal Milk

**PURPOSE**: The purposes of this study are: 1) to determine the teratogenicity of perchlorate in a second species (rat); 2) to measure thyroid stimulating hormone (TSH), thyroxine ($T_4$) and triiodothyronine ($T_3$) changes in developing rats (fetal and neonate) and in adult female rats during pregnancy and lactation; 3) to measure neurohistological and thyroid effects at the same time points; and 4) to correlate these effects with hormone concentration changes at different stages in development of the rat.

Data from this study will be used in developing the final Reference Dose (RfD) for perchlorate, needed by the U.S. Environmental Protection Agency for risk assessment and to establish cleanup levels of perchlorate-contaminated sites.

Physiologically based pharmacokinetic (PBPK) models predict tissue dosimetry in the target species and are used to extrapolate animal data to the human for development of exposure standards. This study will provide data for the development of a physiologically based pharmacodynamic (PBPD) model to predict TSH, $T_4$ and $T_3$ levels in the thyroid gland of fetal, neonatal, nonpregnant, pregnant and lactating rats. The resulting PBPK and PBPD models, combined with a PBPK model for perchlorate iodine inhibition kinetics generated from data in a parallel study, will provide scientific basis for the health risk posed by low level human exposure, including potential sensitive sub-populations, to perchlorate in drinking water.

In order to facilitate study management and expedite sample shipment, the study will be divided into the following four segments:

Part A, during which blood and thyroid samples will be collected from maternal rats and blood, thyroid and brain samples will be collected from fetuses at Caesarean-sectioning on day 21 of presumed gestation;

Part B, during which blood and thyroid samples will be collected from maternal rats on day 10 postpartum and blood, thyroid and brain samples will be collected from pups on days 5 and 10 postpartum;

Part C, during which blood and thyroid samples will be collected from maternal rats on day 22 postpartum, and blood, thyroid and brain samples will be collected from pups on day 5 postpartum (culled pups) and on day 22 postpartum.

Part D, during which standard prenatal developmental toxicity endpoints in maternal rats and fetuses will be evaluated (OPPTS 870.3700).

**TESTING FACILITY**:

Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, Pennsylvania 19044-1297
Telephone: (215) 443-8710
Telefax: (215) 443-8587

**STUDY DIRECTOR**:

Raymond G. York, Ph.D., DABT
Associate Director of Research
E-Mail: raymond.york@primedica.com

**SPONSOR**:

Perchlorate Study Group
Highway 50 & Aerojet Road
Building 20019/Department 0330
Rancho Cordova, California 95670

**STUDY MONITOR**:

Michael F. Girard
Perchlorate Study Group Representative
Telephone: (916) 355-2945
Telefax: (916) 355-6145

**SCIENTIFIC ADVISOR**: Michael L. Dourson, Ph.D., DABT
Toxicology Excellence for Risk Assessment (TERA)
4303 Hamilton Avenue
Cincinnati, Ohio 45223
Telephone: (513) 542-7475, Ext. 14
Telefax: (513) 542-7487
E-Mail: dourson@tera.org

**REGULATORY CITATIONS**:

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines*. OPPTS 870.3700: Prenatal developmental toxicity study. August, 1998.

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines*. OPPTS 870.3800: Reproduction and fertility effects. August, 1998.

U.S. Environmental Protection Agency. Toxic Substances Control Act (TSCA); Good Laboratory Practice Standards; Final Rule. 40 CFR Part 792.

**REGULATORY COMPLIANCE**:

This study will be conducted in compliance with the Good Laboratory Practice (GLP) regulations cited above.

All changes or revisions of this protocol shall be documented, signed by the Study Director and the Sponsor, dated and maintained with the protocol.

The Testing Facility's Quality Assurance Unit (QAU) will audit the protocol, the raw data and the report, and will inspect critical phases of those portions of the study conducted at the Testing Facility in accordance with the Standard Operating Procedures of Argus Research Laboratories, Inc.

Should any portion of the study be conducted by a subcontractor or by the Sponsor, the QAU for that facility will conduct critical phase inspections and audit respective results and reports for that study portion according to the SOPs of that facility. Such critical phase inspection reports and report audits will be submitted by that facility to the Study Director. The dates of the inspections and report submissions will be incorporated into a QAU Statement generated by that facility and provided to the Testing Facility for inclusion in the final report.

The final report will include a compliance statement signed by the Study Director that the report accurately reflects the raw data obtained during the performance of the study and that all applicable GLP regulations were followed in the conduct of the study.

Should significant deviations from GLP regulations occur, each will be described in detail, together with how the deviation might affect the quality or integrity of the study.

**SCHEMATIC OF STUDY DESIGN AND STUDY SCHEDULE:**

See ATTACHMENT 1 to the protocol.

**TEST SUBSTANCE AND CARRIER:**

**Identification:**

Test Substance:

Ammonium Perchlorate (CAS Number 7790-98-9). Source and lot identification will be added to the protocol prior to finalization or documented by amendment.

Carrier:

Reverse osmosis membrane processed deionized water (R.O. deionized water). Results of R.O. deionized water analyses will be included in the raw data and the final report.

Neither the Sponsor nor the Study Director is aware of any potential contaminants likely to be present in the carrier that would interfere with the results of this study. Therefore, no analyses other than those mentioned in this protocol will be conducted.

**Safety Precautions:**

Gloves, mask, appropriate eye protection to be worn during formulation preparation. The Material Safety Data Sheet (MSDS) is attached to the protocol (ATTACHMENT 2).

**Storage:**

| | |
|---|---|
| Bulk Test Substance: | Room temperature. |
| Carrier: | Room temperature. |
| Prepared Formulations: | The prepared stock formulation will be stored refrigerated. Dosage solutions will be stored at room temperature. |

The test substance will be provided by the Testing Facility.

## FORMULATION:

### Frequency of Preparation:

Formulations of the test substance will be prepared at least once weekly at the Testing Facility.

Detailed preparation procedures will be attached to this protocol (ATTACHMENT 3).

### Adjustment for Purity:

The test substance will be considered 100% pure for the purpose of dosage calculations.

### Testing Facility Reserve Samples:

The Testing Facility will reserve a sample (5 g) of each lot of bulk test substance and a sample (5 mL) of the carrier used during the course of the study. Samples will be stored under the previously cited conditions. A reserve sample (1 g) of each lot of the test substance will be taken on the last day of exposure and stored at the Testing Facility under previously cited conditions.

## ANALYSES:

Samples additional to those described below may be taken if deemed necessary during the course of the study.

### Stability of Prepared Solutions:

Documentation of the stability of the prepared solutions, at concentrations that bracket the range to be used in this study, is on file with the Sponsor. Stability has been established for up to 109 days.

### Concentration Analyses:

Concentration of the test substance in prepared solutions will be verified during the course of this study. Triplicate samples (2 mL each) will be taken from each formulation (including stock solution and carrier) on the first and last days of preparations. Two samples from each triplicate set will be shipped for analysis; the remaining samples will be retained at the Testing Facility as backup samples. Backup samples will be stored under the previously cited conditions and discarded at the Testing Facility following report finalization.

**Shipping Instructions**:

Samples to be analyzed will be shipped (refrigerated on cold packs) to:

David Mattie, Ph.D., DABT
Director of Program Development
Operational Toxicology Branch
Air Force Research Laboratory (AFRL)
AFRL/HEST Building 79
2856 G Street
Wright Patterson Air Force Base, Ohio 45433-7400
Telephone: (937) 255-5150, X3105
Telefax: (937) 255-1474
E-Mail: mattie@falcon.al.wpafb.af.mil

The recipient will be notified in advance of sample shipment.

**DISPOSITION**:

All remaining, unused bulk test substance and prepared formulations will be discarded at the Testing Facility.

**TEST SYSTEM**:

**Species/Strain and Reason for Selection**:

The Crl:CD®(SD)IGS BR VAF/Plus® rat was selected as the Test System because: 1) this strain of rat has been demonstrated to be sensitive to reproductive and developmental toxins and has been widely used throughout industry for reproductive and developmental toxicity evaluations; and 2) historical data and experience exist at the Testing Facility[1-3].

**Number**:

| | |
|---|---|
| Initial population acclimated | 500 virgin female rats. |
| Population selected for assignment to exposure groups | 460 virgin female rats (23 rats per group per study segment). |
| Population selected for continuation on study through completion of Caesarean-section or natural delivery observations | 340 mated female rats (16 rats per group per study PARTS A, B and C, and 20 rats per group for study PART D.) |

**Body Weight and Age**:

Female rats will be ordered to have body weights of 200 g to 225 g each at receipt, at which time they will be expected to be at least 60 days of age. Actual body weights will be recorded the day after receipt and will be documented in the raw data. The weight range will be included in the final report.

**Sex**:

Female rats will be given the test substance. Male rats of the same source and strain will be used only as breeders and are not considered part of the Test System. (Note: Breeder male rats will be exposed to the test substance during the cohabitation period, and will be sacrificed upon completion of the cohabitation period.)

**Source**:

Charles River Laboratories, Inc.

The rats will be shipped in filtered cartons by air freight and/or truck from Charles River Laboratories, Inc., to the Testing Facility.

**Identification**:

P Generation:

Rats are permanently identified using Monel® self-piercing ear tags (Gey Band and Tag Co., Inc., No. MSPT 20101). Male rats are given unique permanent identification numbers upon assignment to the Testing Facility's breeder male rat population. Female rats are assigned temporary numbers at receipt and given unique permanent identification numbers when assigned to the study on the basis of day 0 of presumed gestation body weights.

F1 Generation:

Pups will not be individually identified during lactation; all parameters will be evaluated in terms of the litter.

**ANIMAL HUSBANDRY**:

All cage sizes and housing conditions are in compliance with the *Guide for the Care and Use of Laboratory Animals*[4].

**Housing**:

P Generation Rats/F1 Generation Litters:

P generation rats will be individually housed in stainless steel wire-bottomed cages except during the cohabitation and postpartum periods. During cohabitation, each pair of rats will be housed in the male rat's cage. Beginning no later than day 20 of presumed gestation, P generation female rats assigned to natural delivery will be individually housed in nesting boxes. Each dam and delivered litter will be housed in a common nesting box during the postpartum period.

**Nesting Material**:

Nesting material (bed-o'cobs®) will be provided.

Bedding will be changed as often as necessary to keep the animals dry and clean. Analyses for possible contamination are conducted annually and documented in the raw data.

**Room Air, Temperature and Humidity**:

The animal room is independently supplied with at least ten changes per hour of 100% fresh air that has been passed through 99.97% HEPA filters. Room temperature will be maintained at 64°F to 79°F (18°C to 26°C) and monitored constantly. Room humidity will also be monitored constantly and maintained at 30% to 70%.

**Light**:

An automatically controlled 12-hour light:12-hour dark fluorescent light cycle will be maintained. Each dark period will begin at 1900 hours EST.

**Diet**:

Rats will be given Certified Rodent Diet® #5002 (PMI Nutrition International) available *ad libitum* from individual feeders.

**Water**:

All water will be from a local source and passed through a reverse osmosis membrane before use (R.O. deionized water). Water is analyzed monthly for possible bacterial contamination and twice annually for possible chemical contamination.

During the acclimation period, rats will be given R.O. deionized water only, available *ad libitum* from individual amber bottles attached to the cages. Chlorine will not be added to the R.O. deionized water during the acclimation period.

During the exposure period, rats will be given either R.O. deionized water only (carrier control group) or water prepared using R.O. deionized water and the test substance, available *ad libitum* from individual amber bottles attached to the cages.

**Contaminants**:

Neither the Sponsor nor the Study Director is aware of any potential contaminants likely to be present in the certified diet, the drinking water or the nesting material at levels that would interfere with the results of this study. Therefore, no analyses other than those routinely performed by the feed supplier or those mentioned in this protocol will be conducted.

**RANDOMIZATION AND COHABITATION**:

Upon arrival, male and female rats will be assigned to individual housing on the basis of computer-generated random units. After acclimation, rats will be selected for study on the basis of physical appearance and body weight. The rats will be assigned to groups based on computer-generated (weight-ordered) randomization procedures.

Following two weeks of exposure to the test substance, the female rats will be cohabited with breeder male rats, one male rat per female rat. The cohabitation period will consist of a maximum of five days. Female rats with spermatozoa observed in a smear of the vaginal contents and/or a copulatory plug observed *in situ* will be considered to be at day 0 of presumed gestation and assigned to individual housing.

Sixteen female rats per group per study segments A, B and C will be selected either at the time of Caesarean-sectioning or upon completion of appropriate sample collections for rats assigned to natural delivery. Twenty female rats per group for study segment D will be selected for Caesarean-sectioning. After evaluations have been completed for the appropriate number of rats per group per segment, the remaining rats in that group will be sacrificed and discarded without further evaluation.

Day 1 of lactation (postpartum) is defined as the day of birth and is also the first day on which all pups in a litter are individually weighed (pup body weights will be recorded after all pups in a litter are delivered and groomed by the dam).

Randomization procedures specific to study segments (A, B, C or D) are discussed below.

Part A:

The thyroid and brain from one male fetus from each odd-numbered litter and from one female fetus from each even-numbered litter will be selected for histopathological and morphometric evaluation. Thyroid, brain and blood samples will be collected from all remaining fetuses. The timing of these collection processes will be staggered across exposure groups.

Part B:

On day 5 postpartum, four pups per sex per litter will be randomly selected for continuation on study until day 10 postpartum. The timing of this process will be staggered across exposure groups. The remaining pups will be sacrificed for blood, thyroid and brain tissue collection on day 5 postpartum.

The thyroid and brain from one male pup from each odd-numbered litter and from one female pup from each even-numbered litter will be selected for histopathological and morphometric evaluation. One set of male and female pups will be selected for evaluation from those pups sacrificed on day 5 postpartum; a second set will be selected for evaluation from those pups sacrificed on day 10 postpartum. The timing of these collection processes will be staggered across exposure groups.

Part C:

On day 5 postpartum, four pups per sex per litter will be randomly selected for continuation on study until day 22 postpartum. The timing of this process will be staggered across exposure groups. Pups culled on day 5 postpartum will be sacrificed and retained in neutral buffered 10% formalin without further analysis.

Pups continued on study will be sacrificed on day 22 postpartum. From among these pups, the thyroid and brain from one male pup from each odd-numbered litter and from one female pup from each even-numbered litter will be selected for histopathological and morphometric evaluation. The timing of these processes will be staggered across exposure groups.

**ADMINISTRATION:**

**Route and Reason for Choice:**

The oral (drinking water) route was selected because it is the most likely route of human exposure.

**Method and Frequency**:

A constant concentration (%) of the test substance equivalent to the target dosages specified in the table below will be offered to the rats in the drinking water. The actual dosages consumed (mg/kg/day) will be calculated and presented for periods corresponding to body weight and water consumption observations. Concentrations will be adjusted weekly as necessary, based on actual body weight and water consumption values recorded the previous week.

P Generation Rats:

Rats will be given continual access to the test substance in the drinking water beginning 14 days before cohabitation and continuing through the day before sacrifice. During the cohabitation period, male rats will have access to the water bottles of the female rats.

F1 Generation:

F1 generation rats will not be directly given the test substance but may be exposed *in utero* during gestation and via maternal milk and maternal water during the postpartum period.

**Rationale for Dosage Selection and Frequency** :

Target dosage levels were selected by the Sponsor based on previous studies conducted with the test substance. The 10 mg/kg/day dosage resulted in thyroid effects in pups on day 5 postpartum (DP 5) in a neurobehaviorial developmental study (Argus Research Laboratories, Inc., Protocol 1613-002), and was clearly an effect level in a 90-day drinking water study in rats[5].

Because the dosage in the neurobehavioral developmental study did not begin until after mating (confirmation of pregnancy), exposure will start two weeks prior to the start of cohabitation to ensure a hypothyroid state, and will continue until sacrifice.

**Target Dosage Levels, Concentrations and Volumes**:

| Dosage Group | Target Dosage (mg/kg/day) | Concentration (µg/mL)[a] | Argus Batch Number |
|---|---|---|---|
| I | 0 (Carrier) | 0 | B-1416-003-A(Day.Month.Year) |
| II | 0.01 | 0.08 | B-1416-003-B(Day.Month.Year) |
| III | 0.1 | 0.8 | B-1416-003-C(Day.Month.Year) |
| IV | 1.0 | 7.6 | B-1416-003-D(Day.Month.Year) |
| V | 30.0 | 227.4 | B-1416-003-E(Day.Month.Year) |

The test substance will be considered 100% pure for the purpose of dosage calculations.

a. Based on average water consumption of 33 mL per rat per day (132 mL per kg per day) for a 250 g rat. These concentration levels will be adjusted weekly based on actual body weight and water consumption values recorded the previous week.

**TESTS, ANALYSES AND MEASUREMENTS - P GENERATION**:

**Viability**:

All Periods: At least twice daily.

**Clinical Observations and/or General Appearance**:

Pre-exposure Period: At least once.

Exposure Period: Daily.

Maternal Behavior: Days 1, 5, 8 and 10 postpartum (rats assigned to study segment B) or days 1, 5, 8, 14 and 22 postpartum (rats assigned to study segment C). Observed abnormal behavior recorded daily.

Clinical observations may be recorded more frequently than cited above, if deemed appropriate by the Study Director and/or Study Monitor.

**Body Weights**:

Pre-exposure Period: At least once.

Exposure Period: Daily.

Sacrifice: Terminal weight.

**Feed Consumption Values**:

Exposure Period: Daily.

Feed consumption will not be tabulated for female rats without confirmed mating dates during the cohabitation period. Feed consumption will not be tabulated after day 14 postpartum, when it is expected that pups will begin to consume maternal feed.

**Water Consumption Values**:

Exposure Period: Daily.

Water consumption will not be tabulated for female rats without confirmed mating dates during the cohabitation period. Water consumption will not be tabulated after day 14 postpartum, when it is expected that pups will begin to consume maternal water.

**Mating Performance**:

Mating will be evaluated daily during the cohabitation period and confirmed by observation of spermatozoa in a smear of the vaginal contents and/or a copulatory plug observed *in situ*.

**Caesarean-Sectioning Observations - Parts A and D**:

Rats assigned to study segments A and D will be Caesarean-sectioned on day 21 of presumed gestation. Details of maternal blood and tissue sample collection are discussed below. The gravid uterus will be excised and weighed for rats assigned to study segment D. The fetuses will be removed from the uterus and placed in individual containers. The rats will be examined for number and distribution of:

Corpora Lutea.

Implantation Sites [Placentae that appear abnormal (size, color or shape) will be noted in the raw data.]

Live and Dead Fetuses.
(A live fetus is defined as one that responds to stimuli; a dead fetus is defined as a term fetus that does not respond to stimuli and that is not markedly autolyzed; dead fetuses demonstrating marked to extreme autolysis are considered to be late resorptions.)

Early and Late Resorptions.
(A conceptus is defined as a late resorption if it is grossly evident that organogenesis has occurred; if this is not the case, the conceptus is defined as an early resorption.)

**Fetal Observations - Part A:**

Gender, Body Weights and Identification:

Fetuses will be examined for sex. Late resorptions and dead fetuses also will be examined for sex to the extent possible but such observations will not be included in either data summarization or statistical analyses.

The body weight of each fetus will be recorded. Only body weights of live fetuses will be used to determine litter fetal body weight averages.

All fetuses will be fixed for at least forty-eight hours in Bouin's solution and retained in neutral buffered 10% formalin. One male fetus from each odd-numbered litter and one female fetus from each even-numbered litter will be selected for histological and morphometrical evaluation of the brain and thyroid. Details of these evaluations are described below.

Blood Sample Collection:

Blood samples for evaluation of thyroid hormones will be collected from the fetuses not selected for histological evaluation. Samples will be collected following decapitation immediately after sacrifice and pooled per litter. Blood will be collected into serum separator tubes to yield approximately 1125 µL of serum, to be aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination, respectively. Serum samples will be immediately frozen on dry ice and maintained frozen (-70°C) until shipment for analysis.

Shipment of Serum Samples:

After completion of sample collection, samples will be shipped (frozen on dry ice) to:

David Mattie, Ph.D., DABT
Director of Program Development
Operational Toxicology Branch
Air Force Research Laboratory (AFRL)
AFRL/HEST Building 79
2856 G Street
Wright Patterson Air Force Base, Ohio 45433-7400
Telephone: (937) 255-5150, X3105
Telefax: (937) 255-1474
E-Mail: mattie@falcon.al.wpafb.af.mil

The recipient will be notified in advance of sample shipment.

**Fetal Observations - Part D**:

Gross External Alterations and Sex:

Fetuses will be examined for sex and for gross external alterations. Late resorptions and dead fetuses also will be examined for sex and for gross external alterations to the extent possible but such observations will not be included in either data summarization or statistical analyses.

Body Weights and Identification:

The body weight of each fetus will be recorded. Only body weights of live fetuses will be used to determine litter fetal body weight averages. Fetuses will be tagged with identification noting study number, litter number, uterine distribution and fixative.

Soft Tissue Examination:

Approximately one-half of the fetuses in each litter will be examined for soft tissue alterations by using a variation of the microdissection technique of Staples[6].
The heads of these fetuses will be fixed in Bouin's solution and subsequently examined by free-hand sectioning; head sections will be stored in alcohol. The decapitated carcasses will be processed to be retained in glycerin with thymol added as a preservative.

Skeletal Examination:

The remaining fetuses (approximately one-half of the fetuses in each litter) will be examined for skeletal alterations and cartilage development after staining with alizarin red S[7]. The fetuses will be initially fixed in alcohol; skeletal preparations will be retained in glycerin with thymol added as a preservative.

Representative photographs of fetal gross, soft tissue and skeletal alterations will be taken.

**METHOD OF SACRIFICE**:

Rats will be sacrificed by carbon dioxide asphyxiation. For Part A of the study, one male or one female fetus per litter will be sacrificed by an intraperitoneal injection of Beuthanasia®-D Special for thyroid collection and the remaining fetuses in each litter will be sacrificed by decapitation for blood collection. For Part D of the study, live fetuses will be sacrificed by an intraperitoneal injection of Beuthanasia®-D Special, manufactured by Schering-Plough Animal Health. Pups from Parts B and C of the study will be sacrificed by carbon dioxide asphyxiation followed by exsanguination.

**NECROPSY**:

Prior to sacrifice, every effort will be made to avoid inducing stress that could affect scheduled hormone evaluations. Because of the circadian rhythm of thyroid hormones, rats will be sacrificed in the morning hours. Sacrifice will be staggered across dosage groups.

Gross lesions will be retained in neutral buffered 10% formalin for possible future evaluation. Unless specifically cited below, all other tissues will be discarded.

**Maternal Blood and Tissue Sample Collection - Study Segments A, B and C**:

Blood samples for evaluation of thyroid hormones will be collected from the inferior vena cava immediately following sacrifice. The time of sample collection will be documented in the raw data. Blood will be collected into serum separator tubes to yield approximately 1125 µL of serum, to be aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination, respectively. Serum samples will be immediately frozen on dry ice and maintained frozen (-70°C) until shipment for analysis.

The thyroids and parathyroids and a section of the trachea of all maternal rats will be excised and immersed in fixative immediately after collection, following procedures described in ATTACHMENT 4. Following fixation, the thyroid/parathyroid tissue samples will be carefully trimmed and weighed. When possible, the same technician will perform all trimming of thyroid/parathyroid tissues at least 48 hours postfixation. Postfixation organ weights will be recorded. Thyroid tissues will be evaluated histologically. Details of these evaluations are discussed in ATTACHMENT 5.

Shipment of Maternal Serum Samples:

After completion of sample collection for each study segment, samples will be shipped (frozen on dry ice) to:

David Mattie, Ph.D., DABT
Director of Program Development
Operational Toxicology Branch
Air Force Research Laboratory (AFRL)
AFRL/HEST Building 79
2856 G Street
Wright Patterson Air Force Base, Ohio 45433-7400
Telephone: (937) 255-5150, X3105
Telefax: (937) 255-1474

The recipient will be notified in advance of sample shipment.

Shipment of Maternal Thyroid Tissue Samples:

Tissue samples will be shipped for histological evaluation to:

Kathleen Funk, D.V.M., Ph. D.
Experimental Pathology Laboratories, Inc.
222866 Shaw Road
Sterling, Virginia 20166
Telephone: (703) 471-7060 Ext. 206
Telefax: (703) 471-8447
E-Mail: kfunk@epl-inc.com

The recipient will be notified in advance of sample shipment.

**Scheduled Sacrifice - Breeder Male Rats**:

During the course of this study, male rats will be used only as breeders and are not considered part of the Test System. However, these breeder male rats will be exposed to the test substance during the cohabitation period, and will therefore be sacrificed and discarded without further evaluation upon completion of cohabitation.

**Scheduled Sacrifice - Rats Assigned to Caesarean-Sectioning (Parts A and D)**:

On day 21 of presumed gestation, female rats will be sacrificed, blood and tissue samples will be collected as described above for rats assigned to study segment A, and a gross necropsy of the thoracic, abdominal and pelvic viscera will be performed. Gravid uterine weights will be recorded for rats assigned to study segment D. Uteri of apparently nonpregnant rats will be examined while being pressed between glass plates to confirm the absence of implantation sites.

**Scheduled Sacrifice - Parts B and C**:

Rats that deliver a litter will be sacrificed on either day 10 (Part B) or day 22 (Part C) postpartum, blood and tissue samples will be collected as described above, and a gross necropsy of the thoracic, abdominal and pelvic viscera will be performed; the number and distribution of implantation sites will be recorded.

**Dams with No Surviving Pups - Parts B and C**:

Dams with no surviving pups will be sacrificed after the last pup is found dead, missing or presumed cannibalized. A gross necropsy of the thoracic, abdominal and pelvic viscera will be performed. Thyroid/parathyroid tissues will be excised and retained as described above and in ATTACHMENT 4.

**Scheduled Sacrifice - Rats Not Selected for Continuation on Study**:

P generation rats not among the sixteen or twenty per group per study segment selected upon Caesarean-sectioning or completion of sample collection will be sacrificed and discarded without further evaluation.

**Rats Found Dead or Moribund**:

Rats that die or are sacrificed because of moribund condition, abortion or premature delivery will be examined for the cause of death or moribund condition on the day the observation is made. The rats will be examined for gross lesions. Pregnancy status and uterine contents of female rats will be recorded. Aborted fetuses, delivered pups and/or conceptuses *in utero* will be examined to the extent possible, using the same methods described for term fetuses. Uteri of apparently nonpregnant rats will be examined while being pressed between glass plates to confirm the absence of implantation sites. Thyroid/parathyroid tissues will be excised and retained as described above and in ATTACHMENT 4. Gravid uteruses will be saved in 10% buffer formalin.

**TESTS, ANALYSES AND MEASUREMENTS - F1 GENERATION (STUDY SEGMENTS B AND C)**:

**Viability**:

| | |
|---|---|
| Preweaning Period: | Litters will be observed for dead pups at least twice daily. The pups in each litter will be counted once daily. |

**Clinical Observations and/or General Appearance**:

| | |
|---|---|
| Preweaning Period: | Once daily. |

Clinical observations may be recorded more frequently than cited above, if deemed appropriate by the Study Director and/or the Study Monitor.

**Body Weights**:

| | |
|---|---|
| Preweaning Period: | Days 1 (birth), 5, 8 and 10 postpartum (Part B) or days 1, 5, 8, 14 and 22 postpartum (Part C). |
| Sacrifice: | Terminal weight. |

**METHOD OF SACRIFICE - F1 GENERATION:**

As previously cited for P generation rats.

**NECROPSY - F1 GENERATION:**

Prior to sacrifice, every effort will be made to avoid inducing stress that could affect scheduled hormone evaluations. Pups will be sacrificed in the morning hours, because of the circadian rhythm of thyroid hormones. Sacrifice will be staggered across dosage groups.

Gross lesions will be retained in neutral buffered 10% formalin for possible future evaluation. Unless specifically cited below, all other tissues will be discarded.

**Neonatal Blood and Tissue Sample Collection - Parts B and C:**

Blood samples for evaluation of thyroid hormones will be collected from the inferior vena cava immediately following sacrifice. The time of sample collection will be documented in the raw data. Samples collected from all pups sacrificed on day 5 and day 10 postpartum, including culled pups from both Parts B and C of the study, will be pooled by litter; samples collected from pups sacrificed on day 22 postpartum will be pooled by sex by litter. Blood will be collected into serum separator tubes to yield approximately 1125 µL of serum, to be aliquotted into three vials of approximately 500, 500 and 125 µL for TSH, $T_3$ and $T_4$ determination, respectively. If necessary, sample collection will be prioritized by hormone as follows: TSH, followed by $T_3$, followed by $T_4$. Serum samples will be immediately frozen on dry ice and maintained frozen (-70°C) until shipment for analysis.

All pups will be retained in neutral buffered 10% formalin. The thyroid and brain from one male pup from each odd-numbered litter and from one female pup from each even-numbered litter will be selected for histopathological and morphometric evaluation. One set of male and female pups will be selected for evaluation from those pups sacrificed on day 5 postpartum (Part B); a second set will be selected for evaluation from those pups sacrificed on day 10 postpartum (Part B); and a third set will be selected for evaluation from those pups sacrificed on day 22 postpartum (Part C). Brain and thyroid weights will be recorded postfixation. Details of the histopathological and morphometric analyses are described in ATTACHMENT 5. Pups not selected for these evaluations will be retained in neutral buffered 10% formalin for possible future evaluation. (Note: Pups culled on day 5 postpartum from Part C of the study will be retained in neutral buffered 10% formalin without further evaluation.)

Shipment of Neonatal Serum Samples:

After completion of sample collection for each study segment, samples will be shipped (frozen on dry ice) to:

David Mattie, Ph.D., DABT
Director of Program Development
Operational Toxicology Branch
Air Force Research Laboratory (AFRL)
AFRL/HEST Building 79
2856 G Street
Wright Patterson Air Force Base, Ohio 45433-7400
Telephone: (937) 255-5150, Ext. 3105
Telefax: (937) 255-1474

The recipient will be notified in advance of sample shipment.

Shipment of Neonatal Thyroid Tissue Samples:

Thyroid tissue samples will be shipped (ambient conditions) for histopathological and morphometric evaluations to:

Kathleen A. Funk, Ph.D
Experimental Pathology Laboratories, Inc.
22866 Shaw Road
Sterling, Virginia 20166
Telephone: (703) 471-7060
Telefax: (703) 471-8447
E-Mail: kfunk@epl-inc.com

The recipient will be notified in advance of sample shipment.

Shipment of Neonatal Brain Tissue Samples:

Tissues for neurohistological evaluations will be shipped (ambient conditions) to:

Robert H. Garman, D.V.M., Diplomate, ACVP
Consultants in Veterinary Pathology
1909 New Texas Road
Plumboro, PA 15239
Telephone: (724) 733-5154
Telefax: (724) 733-3032
E-Mail: vetpathol@cs.com

The recipient will be notified in advance of sample shipment.

**Scheduled Sacrifice - Part B**:

Pups not selected for continuation on study will be sacrificed on day 5 postpartum for blood and tissue sample collection as described above. The remaining pups will be sacrificed on day 10 postpartum for blood and tissue sample collection as described above. Pups will be retained in neutral buffered 10% formalin.

**Scheduled Sacrifice - Part C**:

Pups not selected for continuation on study will be sacrificed on day 5 postpartum for blood sample collection as described above, and retained in neutral buffered 10% formalin without further analysis.

Pups selected for continuation on study will be sacrificed on day 22 postpartum for blood and tissue sample collection as described above. Pups will be retained in neutral buffered 10% formalin.

**Pups Found Dead on Day 1 Postpartum**:

Pups that die before examination of the litter for pup viability will be evaluated for vital status at birth. The lungs will be removed and immersed in water. Pups with lungs that sink will be identified as stillborn; pups with lungs that float will be identified as liveborn, and to have died shortly after birth. Pups with gross lesions will be preserved in Bouin's solution for possible future evaluation.

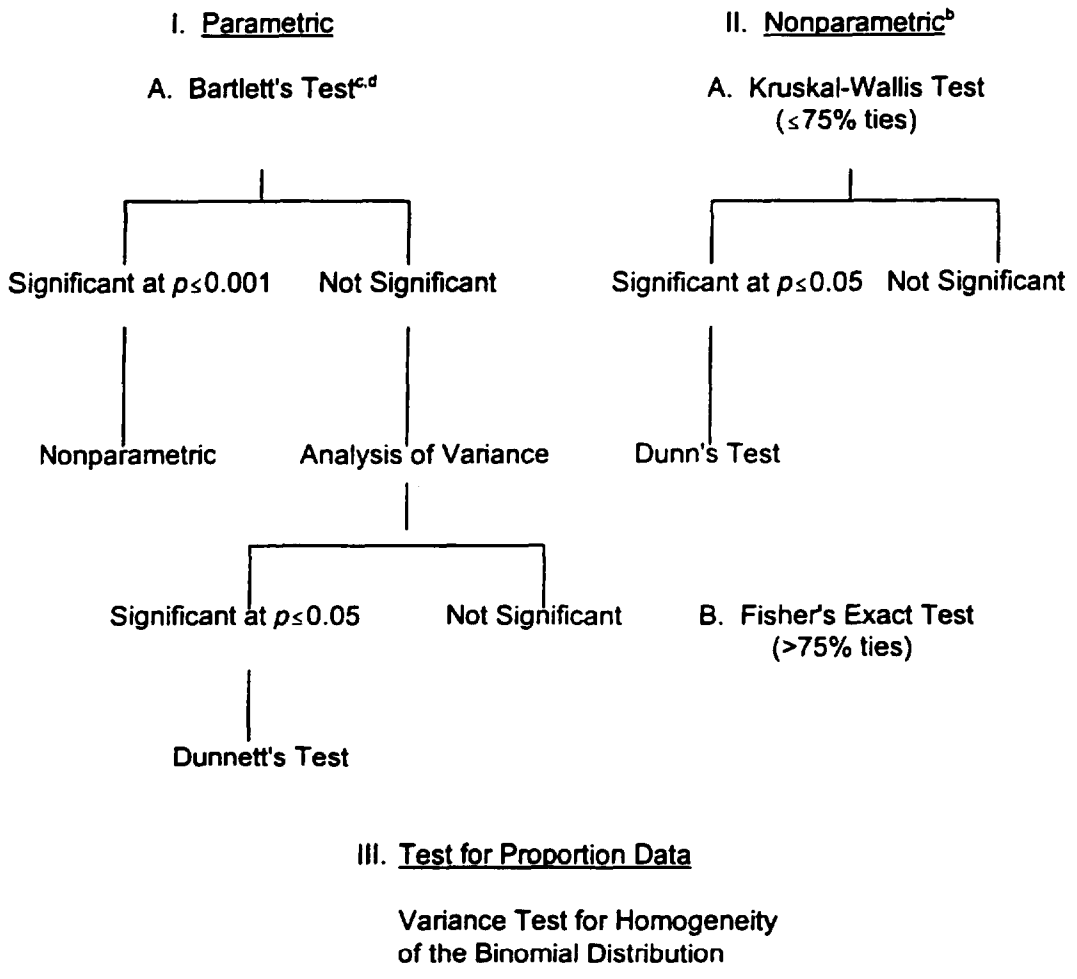
**Pups Found Dead or Moribund on Days 2 to 22 Postpartum**:

Pups found dead or sacrificed because of moribundity will be examined for gross lesions and for the cause of death or the moribund condition. Pups with gross lesions found on days 2 to 4 postpartum will be preserved in Bouin's solution for possible future evaluation; gross lesions of pups found on days 5 to 21 postpartum will be preserved in neutral buffered 10% formalin.

**PROPOSED STATISTICAL METHODS**[8-14]:

Averages and percentages will be calculated. Litter values will be used where appropriate. Additional procedures and/or analyses may be performed, if appropriate.

Type of Test[a]

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a. Statistically significant probabilities are reported as either $p \leq 0.05$ or $p \leq 0.01$.
b. Proportion data are not included in this category.
c. Used only to analyze data for homogeneity of variance.
d. Test for homogeneity of variance.

**DATA ACQUISITION, VERIFICATION AND STORAGE:**

Data generated during the course of this study will be recorded either by hand or using the *Argus Reproductive and Developmental Toxicology Data Collection System* and the *Vivarium Temperature and Relative Humidity Monitoring System*. All data will be tabulated, summarized and statistically analyzed using the *Argus Reproductive and Developmental Toxicology Data Collection System*, the *Vivarium Temperature and Relative Humidity Monitoring System, Microsoft Excel* [part of Microsoft Office 97 (version SR-2)] and/or *The SAS System* (version 6.12).

Records will be reviewed by the Study Director and/or appropriate management personnel within 21 days after generation. All original records will be stored in the archives of the Testing Facility. All original data will be bound and indexed. A copy of all raw data will be supplied to the Sponsor upon request. Preserved tissues will be stored at the Testing Facility at no charge for one year after mailing of the draft final report, after which time the Sponsor will be contacted to determine the disposition of these materials.

**RECORDS TO BE MAINTAINED:**

Protocol and Amendments.
Test Substance, Vehicle and/or Reagent Receipt, Preparation and Use.
Animal Acquisition.
Randomization Schedules.
Mating History.
Treatment (if prescribed by Staff Veterinarian).
General Comments.
Clinical Observations and/or General Appearance.
Blood and Tissue Sample Collection, Processing and Shipment.
Body Weights.
Feed Consumption Values.
Water Consumption Values.
Caesarean-Sectioning and Fetal Observations.
Litter Observations.
Gross Necropsy Observations.
Organ Weights.
Photographs (if required).
Study Maintenance (room and environmental records).
Feed, Water and Bedding Analyses.
Packing and/or Shipment Lists.

**KEY PERSONNEL:**

Executive Director of Research: Mildred S. Christian, Ph.D., Fellow, ATS
Director of Research: Alan M. Hoberman, Ph.D., DABT
Associate Director of Research and Study Director: Raymond G. York, Ph.D., DABT
Director of Operations and Compliance: Barbara J. Patterson, B.A.
Director of Laboratory Operations: John F. Barnett, B.S.
Director of Study Management: Valerie A. Sharper, M.S.
Manager of Animal Operations and Chairperson, Institutional Animal Care and Use Committee: Dena C. Lebo, V.M.D.
Consultant, Veterinary Pathology: Robert H. Garman, D.V.M., Diplomate, ACVP
Consultant, Veterinary Pathology: Kathleen A. Funk, D.V.M., Ph.D., Diplomate, ACVP

**FINAL REPORT:**

A comprehensive draft final report will be prepared on completion of the study and will be finalized following consultation with the Sponsor. The report will include the following:

Summary and Conclusion.
Experimental Design and Method.
Evaluation of Test Results.
Appendices: Figures, Summary and Individual Tables Summarizing the Above Data, Protocol and Associated Amendments and Deviations, Study Director's GLP Compliance Statement, Reports of Supporting Data (if appropriate) and QAU Statement.

**INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE STATEMENT:**

The procedures described in this protocol have been reviewed by the Testing Facility's Institutional Animal Care and Use Committee. All procedures described in this protocol that involve study animals will be conducted in a manner to avoid or minimize discomfort, distress or pain to the animals.

The Sponsor's signature below documents the fact that information concerning the necessity for conducting this study and the fact that this is not an unnecessarily duplicative study may be obtained from the Sponsor. No alternative (*in vitro*) procedures were available for meeting the stated purposes of the study.

**REFERENCES**:

1. Christian, M.S. and Voytek, P.E. (1982). *In Vivo Reproductive and Mutagenicity Tests*. Environmental Protection Agency, Washington, D.C. National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

2. Christian, M.S. (1984). Reproductive toxicity and teratology evaluations of naltrexone (Proceedings of Naltrexone Symposium, New York Academy of Sciences, November 7, 1983), J. Clin. Psychiat. 45(9):7-10.

3. Lang, P.L. (1988). *Embryo and Fetal Developmental Toxicity (Teratology) Control Data in the Charles River Crl:CD®BR Rat*. Charles River Laboratories, Inc., Wilmington, MA 01887-0630. (Data base provided by Argus Research Laboratories, Inc.)

4. Institute of Laboratory Animal Resources (1996). *Guide for the Care and Use of Laboratory Animals*. National Academy Press, Washington, D.C.

5. Siglin, J.C. (1998). A 90-day drinking water toxicity study in rats with ammonium perchlorate (Final Report, Study No. 3455.1). Springborn Laboratories, Inc., Health and Environmental Science, Spencerville, Ohio.

6. Staples, R.E. (1974). Detection of visceral alterations in mammalian fetuses. Teratology 9(3):A37-38.

7. Staples, R.E. and Schnell, V.L. (1964). Refinement in rapid clearing technique in the KOH-alizarin red S method for fetal bone. Stain Technol. 39:61-63.

8. Snedecor, G.W. and Cochran, W.G. (1967). Variance test for homogeneity of the binomial distribution. *Statistical Methods*, 6th Edition, Iowa State University Press, Ames, pp. 240-241.

9 Sokal, R.R. and Rohlf, F.J. (1969). Bartlett's test of homogeneity of variances. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 370-371.

10. Snedecor, G.W. and Cochran, W.G. (1967). Analysis of Variance. *Statistical Methods*, 6th Edition, Iowa State University Press, Ames, pp. 258-275.

11. Dunnett, C.W. (1955). A multiple comparison procedure for comparing several treatments with a control. J. Amer. Stat. Assoc. 50:1096-1121.

12. Sokal, R.R. and Rohlf, F.J. (1969). Kruskal-Wallis Test. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 388-389.

13. Dunn, O.J. (1964). Multiple comparisons using rank sums. Technometrics 6(3):241-252.

14. Siegel, S. (1956). *Nonparametric Statistics for the Behavioral Sciences*, McGraw-Hill, New York, pp. 96-104.

**PROTOCOL APPROVAL:**

**FOR THE TESTING FACILITY**

Alan M. Hoberman, Ph.D., DABT
Director of Research

27-Dec-99
Date

Raymond G. York, Ph.D., DABT
Associate Director of Research
Study Director

27-Dec-99
Date

Dena C. Lebo, V.M.D.
Chairperson, Institutional Animal Care and Use Committee

27 Dec 99
Date

**FOR THE SPONSOR**

Michael F. Girard
Study Monitor

17 JAN 00
Date

Michael L. Dourson, Ph.D., DABT
Scientific Advisor

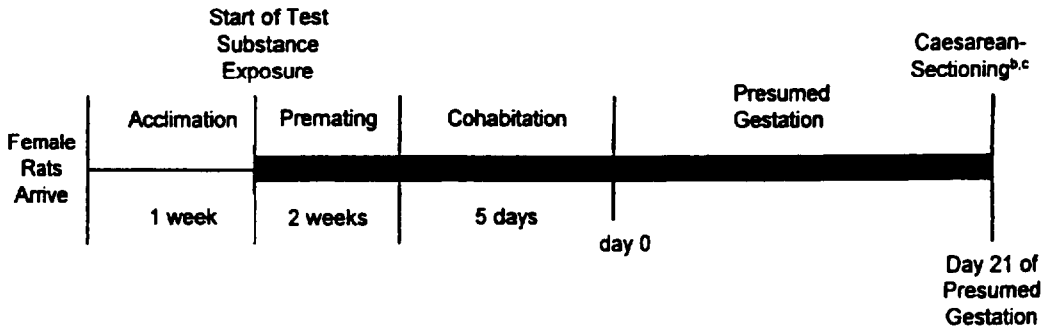
1-25-00
Date

**ATTACHMENT 1**

**SCHEMATIC OF STUDY DESIGN AND STUDY SCHEDULE**

## STUDY SCHEMATIC

### Study Segments A and D[a]



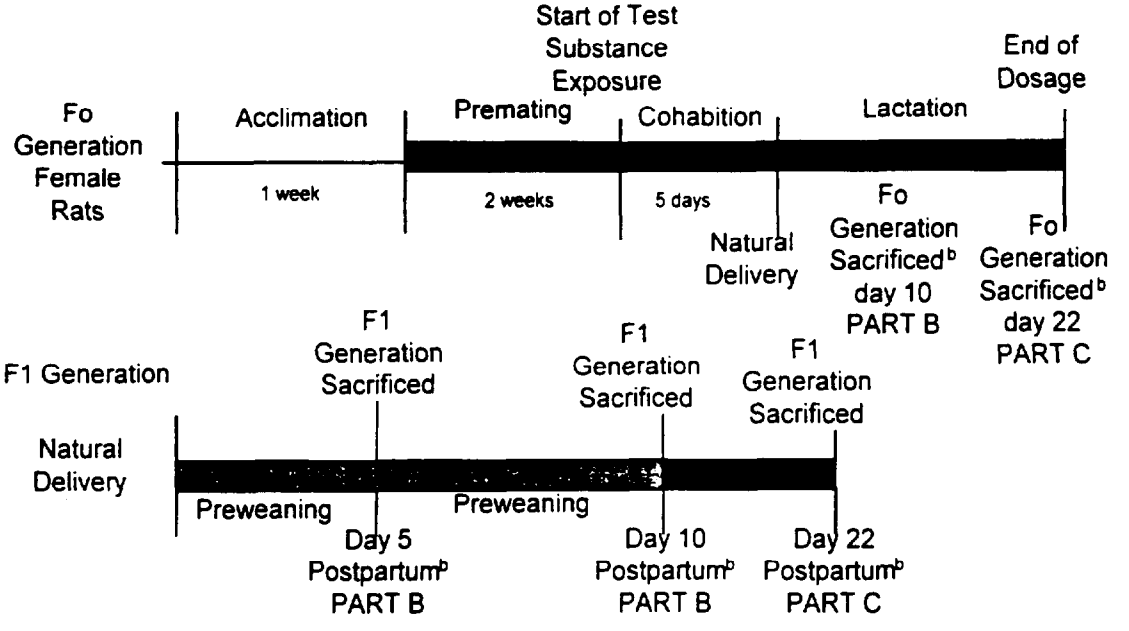

Test Substance Exposure Period.

a. For additional details see "Tests, Analyses and Measurements" section of the protocol.

b. Female rats evaluated for Caesarean-sectioning parameters (e.g. Corpora lutea, implantation sites).

c. Tissue and blood samples collection from rats and fetuses assigned to study segment A. Full fetal evaluation for gross, soft tissue and skeletal alterations for fetuses from study segment D.

**Study Segments B and C[a]**




Test Substance Exposure Period through Maternal Milk.
Test Substance Exposure Period.

a. For additional details see "Tests, Analyses and Measurements" section of the protocol.

b. Blood and tissue sample collection.

## SCHEDULE[a]

### Part A

| | |
|---|---|
| 21 DEC 99 | Animal Receipt - Acclimation Begins. |
| 28 DEC 99 | Initiation of Test Substance Exposure (Two weeks prior to cohabitation and continuing through the day before sacrifice). |
| 10 JAN 00 PM - 15 JAN 00 AM | Cohabitation Period. |
| 11 JAN 00 | First Possible Day 0 of Presumed Gestation. |
| 15 JAN 00 | Last Possible Day 0 of Presumed Gestation. |
| 01 FEB 00 | First Possible Day 21 of Presumed Gestation Caesarean-sectioning. |
| 05 FEB 00 | Last Possible Day 21 of Presumed Gestation Caesarean-sectioning. |

### Part B

| | |
|---|---|
| 21 DEC 99 | Animal Receipt - Acclimation Begins. |
| 01 JAN 00 | Initiation of Test Substance Exposure (Two weeks prior to cohabitation and continuing through the day before sacrifice). |
| 14 JAN 00 PM - 19 JAN 00 AM | Cohabitation Period. |
| 15 JAN 00 | First Possible Day 0 of Presumed Gestation. |
| 19 JAN 00 | Last Possible Day 0 of Presumed Gestation. |
| 05 FEB 00 | First Possible Delivery (Day 21 of presumed gestation). |
| 13 FEB 00 | Last Possible Delivery (Day 25 of presumed gestation). |

---

a. The study initiation date is the day the Study Director signs the protocol.

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - - - - - - HANDLING AND STORAGE- - - - - - - - - - -

REFER TO SECTION 8.

ADDITIONAL INFORMATION

MIXTURES OF AMMONIUM PERCHLORATE WITH SULFUR, ORGANIC MATERIALS, FINELY DIVIDED METALS ARE EXPLOSIVE AND HAVE A SHOCK-SENSITIVITY EQUIVALENT TO PICRIC ACID. IT IS INCOMPATIBLE WITH ALUMINUM, COPPER, CARBON, POTASSIUM PERMANGANATE, POTASSIUM PERIODATE, POTASSIUM DICHROMATE, CADMIUM OXIDE, COPPER OXIDE, ZINC OXIDE, IRON OXIDE, DICHROMIUM TRIOXIDE, COPPER CHROMITE, METAL PERCHLORATES ALL OF WHICH CONSIDERABLY LOWER ITS EXPLOSION TEMPERATURE OF 440 C AND INCREASE ITS SENSITIVITY TO FRICTION. MIXTURES WITH PHOSPHOROUS ARE SHOCK-SENSITIVE. REACTS VIOLENTLY WITH CHLORINE OR CHLORINE DIOXIDE, EXPLOSIONS MAY RESULT.

SECTION 8. - - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - -

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
HARMFUL SOLID.
IRRITANT.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM COMBUSTIBLE MATERIALS, HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - - -

APPEARANCE AND ODOR

WHITE POWDER

PHYSICAL PROPERTIES

SPECIFIC GRAVITY: 1.950

SECTION 10. - - - - - - - - - -STABILITY AND REACTIVITY - - - - - - - - -

INCOMPATIBILITIES

STRONG REDUCING AGENTS
STRONG ACIDS
HEAT-SENSITIVE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

AMMONIA

SECTION 11. - - - - - - - - - TOXICOLOGICAL INFORMATION - - - - - - - -

ACUTE EFFECTS

HARMFUL IF SWALLOWED.
MAY BE HARMFUL IF INHALED.
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

RTECS #: SC7520000

PERCHLORIC ACID, AMMONIUM SALT

TOXICITY DATA

| | |
|---|---|
| ORL-RAT LD50:4200 MG/KG | GISAAA 28(8),6,63 |
| ORL-MUS LD50:1900 MG/KG | GISAAA 28(8),6,63 |
| ORL-RBT LD50:1900 MG/KG | GISAAA 28(8),8,63 |
| ORL-GPG LD50:3310 MG/KG | GISAAA 28(8),8,63 |

TARGET ORGAN DATA

BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (EXCITEMENT)
BEHAVIORAL (ATAXIA)
BEHAVIORAL (COMA)
LUNGS, THORAX OR RESPIRATION (DYSPNAE)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. - - - - - - - - - - ECOLOGICAL INFORMATION - - - - - - - - - - -

DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - - - - - DISPOSAL CONSIDERATIONS - - - - - - - - - -

FOR SMALL QUANTITIES: CAUTIOUSLY ADD TO A LARGE STIRRED EXCESS OF WATER. ADJUST THE PH TO NEUTRAL, SEPARATE ANY INSOLUBLE SOLIDS OR LIQUIDS AND PACKAGE THEM FOR HAZARDOUS-WASTE DISPOSAL. FLUSH THE AQUEOUS SOLUTION DOWN THE DRAIN WITH PLENTY OF WATER. THE HYDROLYSIS AND NEUTRALIZATION REACTIONS MAY GENERATE HEAT AND FUMES WHICH CAN BE CONTROLLED BY THE RATE OF ADDITION.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - - - - - - TRANSPORT INFORMATION - - - - - - - - - -

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - - - - - REGULATORY INFORMATION - - - - - - - - - - -

EUROPEAN INFORMATION

EC INDEX NO: 017-009-00-0
EXPLOSIVE
HARMFUL
R 9
EXPLOSIVE WHEN MIXED WITH COMBUSTIBLE MATERIAL.
R 44
RISK OF EXPLOSION IF HEATED UNDER CONFINEMENT.
S 25
AVOID CONTACT WITH EYES.
S 16
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
S 27
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.
S 24/25
AVOID CONTACT WITH SKIN AND EYES.

REVIEWS, STANDARDS, AND REGULATIONS

OEL-MAK
NOHS 1974: HZD 80353; NIS 2; TNF 101; NOS 3; TNE 1062
NOES 1983: HZD 80353; NIS 1; TNF 7; NOS 1; TNE 1445; TFE 230
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - - - - - - - OTHER INFORMATION- - - - - - - - - - - -

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR

PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.
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FLUKA CHEMIE AG
LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY

# ATTACHMENT 3

## TEST SUBSTANCE PREPARATION PROCEDURE

ATTACHMENT 3



# TEST SUBSTANCE PREPARATION PROCEDURE

Test Substance: Ammonium Perchlorate
Vehicle: R.O. Deionized Water

A. Purpose:

The purpose of this procedure is to provide a method for the preparation of dosage solutions of ammonium perchlorate for oral administration to rats on Argus Research Laboratories, Inc., Study, 1416-003.

B. General Information:

1. All solution containers will be labeled and color-coded. Each label will specify the protocol number, test substance identification, Argus batch number, concentration, dosage level, preparation date, expiration date and storage conditions.

2. Solutions will be prepared:

   __ Daily __ Weekly __ For _ days of use
   _X_ At Least once Weekly __ By Sponsor

3. Solutions will be prepared from a stock solution (10 mg/mL, w:v) and diluted to each respective concentration. Stock solution will be prepared as needed. NOTE: Stock solution will be stored refrigerated and may appear cloudy.

4. Safety:

   _X_ Gloves, lab coat, goggles or safety glasses and faceshield
   __ Dust-Mist Respirator
   _X_ Half-Face Respirator or/Positive Pressure Hood
   __ Full-Face Respirator/Positive Pressure Hood
   __ Tyvek Sleeves or Tyvek suit
   _X_ Prepared in a Fume Hood
   _X_ Explosive (avoid contact with metals or reducing agents)

5. Dosage solutions adjusted for % Purity or Correction Factor:

   __Yes _X_ No (Calculations based on 100%)
   __% Activity ___% Purity __ Correction Factor

6. Sampling requirements: Cited in protocol.

ATTACHMENT 3



TEST SUBSTANCE PREPARATION PROCEDURE

7. Storage: Cited in protocol.

C. Stock Solution Preparation

1. Prepare a stock solution of test substance by accurately weighing the required amount of test substance to an appropriately labeled container (see PREPARATION CALCULATIONS).

2. Add approximately 80% of vehicle to the container (see PREPARATION CALCULATIONS).

3. Q.S. to final volume with vehicle (see PREPARATION CALCULATIONS).

4. Add a stir bar to the container, place on a magnetic stir plate and agitate until test article has mixed.

D. Dosage Solution Preparation:

1. Measure the required amount of test substance stock solution that is needed for the appropriate dosage level into an appropriately sized, labeled container (see PREPARATION DILUTION CALCULATIONS).

2. Add approximately 80% of vehicle to the container (see PREPARATION DILUTION CALCULATIONS).

3. Q.S. to final volume with vehicle (see PREPARATION DILUTIONS CALCULATIONS).

4. Add a stir bar to the container, place on a magnetic stir plate and agitate until test substance has mixed.

5. Repeat steps (1) through (4) for each concentration.

Written by: Sheila Ameen

Approved by: [illegible] Date: 12/27/99

Clarification: X No ___ Yes (See attached clarification form.)

Initials/Date: MOB 3-20-00

# ATTACHMENT 4

## TRIMMING AND WEIGHING OF ADULT RAT THYROID TISSUES

## TRIMMING AND WEIGHING OF ADULT RAT THYROID TISSUES

Thyroid glands and trachea are removed intact at necropsy and are trimmed and weighed after at least 48 hours of fixation in neutral buffered 10% formalin. Thyroid glands are trimmed and weighed in a stratified manner (i.e., thyroid glands from two rats per group are processed followed by two rats from the next dosage group).

To trim, a small diameter round applicator is tapered to fit through the trachea such that the trachea with the thyroid gland attached can be moved approximately one-third of the way onto the stick. This provides stability and ease in manipulating the thyroid glands during the trimming process. Thyroid gland trimming is done with the aid of a zoom stereomicroscope (e.g., Olympus, Model BHS). The thyroid glands are removed from the trachea by trimming around the periphery of both lobes and the isthmus and gently separating the thyroid gland from the trachea using a No. 11 surgical blade. After the thyroid gland is removed, it is weighed to four decimal places on an electronic balance (e.g., Mettler, Model No. AE100) and is placed back into fixative; the trachea is discarded.

# ATTACHMENT 5

## HISTOPATHOLOGY AND MORPHOMETRIC ANALYSIS

## HISTOPATHOLOGY AND MORPHOMETRIC ANALYSIS

**Thyroid**:

For the histopathologic evaluation, the pathologist will grade each tissue for the degree/severity of hypertrophy and for the degree/severity of hyperplasia separately. The pathologist will submit a Standard Operating Procedure that includes criteria for evaluating thyroid hypertrophy versus hyperplasia to the Sponsor for review prior to the start of the histolopathological analysis.

For the morphometric analysis, thyroid follicular lumen area and epithelial cell height will be analyzed. The pathologist will submit a Standard Operating Procedure that addresses the following issues to the Sponsor for review prior to analysis: criteria for selecting follicles to measure; approaches for standardizing subjective elements such as different size, shape and amount of follicle in section; approaches for ensuring that follicle measurements are independent and that the same follicle is not read on multiple sections; and the appropriate statistical analyses to separate treatment effects from variation due to sampling.

**Brain**:

For histopathological analysis, the regions of the brain to be examined should be those that are dependent on the development of the thyroid gland. Suggested regions for evaluation include the caudal portion of the corpus callosum, the hippocampus, and the neocortex. Other endpoints in the brain that are dependent on thyroid development include the packing density of cells in the cerebral and cerebellar cortex, and the degree of myelination. The pathologist will submit a Standard Operating Procedure that includes criteria for evaluating various regions of the brain to the Sponsor for review prior to the start of the histopathological analysis.

For the morphometric analysis, a Standard Operating Procedure will be in place to ensure comparability of the plane-of-cut for brain sections to reduce variability.

PRIMEDICA

Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, PA 19044
Telephone: (215) 443-8710
Telefax: (215) 443-8587

PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 1 - 27 January 2000

---

1. Shipping Instructions (pages 6 and 14 of the protocol):

   [Effective Date: 10 January 2000] The e-mail address for David Mattie, Ph.D., DABT should be David.Mattie@wpafb.af.mil rather than mattie@falcon.al.wpafb.af.mil.

   An additional Sponsor contact for formulations analyses will be Latha Narayanan. Her e-mail address is Latha.Narayanan@wpafb.af.mil.

   Reason for Change:

   This change corrects the protocol and adds an additional contact.

2. Randomization and Cohabitation (page 9 of the protocol):

   [Effective Date: 10 January 2000] The sixteen female rats per group per study Segments A, B and C will be randomly selected for sample collections only from female rats that have litters of at least 12 live offspring at the time of Caesarean-sectioning (Part A) or at the time of the first tissue collection (Parts B and C).

   Reason for Change:

   This change was requested by the Sponsor for clarification of the randomization procedures.

3. Randomization and Cohabitation, Fetal Observations and Neonatal Blood and Tissue Sample Collection - Parts A, B and C (pages 10, 14 and 19 of the protocol):

   [Effective Date: 10 January 2000] The thyroid and brain from one male and one female fetus or pup per litter will be selected for histopathological evaluation, rather than selecting one male from each odd-numbered litter and one female from each even-numbered litter.

   Reason for Change:

   This change was made at the request of the Sponsor in order to increase the number of fetuses and pups sampled from eight to sixteen per group per study segment.

4. Fetal Observations, Part A (page 14 of the protocol):

   Fetal thyroids will be shipped for histological evaluation to Kathleen Funk, D.V.M., Ph. D. at Experimental Pathology Laboratories, Inc., at the address cited on page 17 of the protocol. Fetal brains will be shipped for histopathology and morphometry to Robert H. Garman, D.V.M., Consultants in Veterinary Pathology, Monroeville, PA.

   Reason for Change:

   This change was made to correct the protocol.

5. Rats Found Dead or Moribund (page 18 of the protocol):

   [Effective Date: 10 January 2000] Rats found dead or moribund sacrificed will have a complete necropsy. All tissues will be saved in neutral buffered 10% formalin for possible histopathological examination.

   Reason for Change:

   This change was made at the request of the Sponsor; evaluation of tissues may aid in determination of the cause of death.

6. Trimming and Weighing of Adult and Pup Thyroid Tissues (page 1 of ATTACHMENT 4 to the protocol):

   [Effective Date: 10 January 2000] Thyroid glands will be weighed at Experimental Pathology Laboratories, Inc. (EPL). Thyroid glands will be weighed from all rats in one group at a time, rather than in a stratified manner. The same

personnel will weigh the thyroid glands for both the pups and adults in that same dosage group.

Specific information (i.e., manufacturer, size) about the equipment used (zoom steromicroscope, surgical blade, electronic balance) will not be specified in the protocol.

Trimming - Each thyroid gland will be carefully removed from the trachea for all rats/pups in all dosage groups except for DG 21 fetuses from Part A. For DG 21 fetuses, the thyroids will be left on the trachea and the trachea with thyroid still attached will be laid flat in the cassette.

Weighing - The thyroid glands will be weighed for all adult females and for pups at DL 5, 10 and 22 (Note: the thyroids of DG 21 fetuses are not weighed). Adult and pup thyroids will be weighed according to the method described in ATTACHMENT 4 of the protocol. Weights will be recorded to four decimal places on an electronic balance.

Reason for Change:

Advantages to weighing all thyroids from one group before moving to the next group are: 1) less likelihood of getting animal sequences out of order; 2) organ weight sheets of manageable size may be constructed for each group ahead of time; 3) speed; and 4) identical treatment of pups and adults.

Specifications for equipment will not be included in the protocol, in case a particular specification cannot be met. Information about the equipment will be included in the raw data or the Standard Operating Procedures for EPL.

This clarifies the procedures to be followed in the trimming and weighing of thyroid tissues.

7. Histopathology and Morphometric Analysis (ATTACHMENT 6 to the protocol):

Thyroid

[Effective Date: 10 January 2000] Histopathologic evaluation of thyroid glands will be conducted in stages. The tissues will be examined in the following order: day 5 of lactation (DL 5) pups, DL 10 dams and pups, DL 22 dams and pups and day 21 of gestation (DG 21) dams and fetuses.

Histopathological evaluation of brains will be conducted in stages. The tissues will be examined in the following order: DLs 10 and 22 pups, DL 5 pups and DG 21 fetuses.

All morphometric analysis of the thyroid will be deleted.

Embedding - Each thyroid gland for each rat/pup from all dosage groups at all sacrifices (except DG 21 fetuses) will be embedded with the thyroid lobes placed flat (longitudinally) in one block. The thyroids for DG 21 fetuses will be left on the trachea and the trachea placed longitudinally in the block.

Microtoming - One full face section will be made of each thyroid lobe per slide.

Staining - Each thyroid gland from all rats/pups/fetuses from all sacrifices will be prepared to a standard H&E section.

All thyroids for all rats from all sacrifices will be evaluated microscopically. See attached Procedure for Histopathology of the Thyroid Gland (ATTACHMENT 6).

The final tables for the histopathology report will have enlarged margins (one inch), and the draft final report will be submitted on disk to:

Ray York, Ph.D., DABT
Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, Pennsylvania 19044-1297
Telephone: (215) 443-8710
Telefax: (215) 443-8587

The final report will be submitted as a hard copy to the above address.

Reason for Change:

This attachment provides procedures used in the collection, processing and histopathological evaluation the thyroid tissue.

8. ATTACHMENT 7 to the Protocol; Brain Pathology Supplement and Procedure for Histopathology of the Thyroid Gland:

[Effective Date: 10 January 2000] ATTACHMENT 7 has been added to the protocol and is attached to this amendment.

Reason for Change:

This attachment provides procedures used in the collection, processing and histopathological evaluation of brain tissue and the histopathological evaluation of thyroid tissue.

27 JAN 00 — 27-JAN 00

Alan M. Hoberman, Ph.D., DABT Date
Director of Research

Raymond G. York, Ph.D., DABT Date
Associate Director of Research
Study Director

27 JAN 00 — FEB 11 2000

Dena C. Lebo, V.M.D. Date
Chairperson, Institutional Animal Care and Use Committee

Michael F. Girard Date
Study Monitor

2-1-00

Michael L. Dourson, Ph.D., DABT Date
Scientific Advisor

# Procedure for Histopathology of the Thyroid Gland

## I. Histopathology

### *A. Colloid*

1. Coded as DECREASED COLLOID based on either:
   a. reduction or absence of colloid, or
   b. pale, lacy or granular colloid

### *B. Follicular Cell Hypertrophy*

1. Diagnosed ONLY when not associated with follicular cell hyperplasia in the same gland.

2. Coded as AREA AFFECTED

| a. Grade | % of Follicles Affected |
|---|---|
| 1 | 1-10 |
| 2 | 11-50 |
| 3 | 51-100 |

### *C. Follicular Cell Hyperplasia*

1. Only diagnosed when there is either stratification (multiple layers) or papillary infolding of single or multiple layers of follicular cells. A capillary may be seen in the core of the papillary infolding. Hypertrophic follicular cells maybe present but will not be diagnosed separately when associated with follicular cell hyperplasia. In such instances, only follicular cell hyperplasia will be diagnosed. Most of the follicles in the affected thyroid gland are small.

2. Coded as AREA AFFECTED

| a. Grade | % of Follicles Affected |
|---|---|
| 1 | 1-10 |
| 2 | 11-50 |
| 3 | 51-100 |

3. Coded as OVERALL SEVERITY
   a. The average severity of all the affected follicles with follicular cell hyperplasia.
   b. Grading scale 1-3 where 1=mild, 2=moderate, 3=severe.

4. Coded as GREATEST SEVERITY
    a. The severity grade given to the follicle with the most follicular cell hyperplasia. The severity of the follicular cell hyperplasia based on the complexity of the pattern of hyperplasia and/or multiplicity within the affected thyroid gland follicle.
    b. Grade Description
        1 Simple papillary infolding of follicular epithelium usually with a capillary in its core.
        2 Multiple papillary infolding with or without stratification of the follicular epithelium in other parts of the same thyroid follicle.
        3 Hyperplasia of the follicular epithelium having a complex pattern (eg, microfollicular pattern or extensive branching). The follicular cells may appear more basophilic. There is no compression due to the hyperplasia. Generally smaller and less complex than the follicular cell adenomas.
    c. Example: If follicular cell hyperplasia is seen in 8 follicles (4 of minimal severity, 2 of mild severity and 2 with moderate severity):

Area Affected = 1%=1
Overall Severity = 2 (rounded up from 1.75)
Greatest Severity = 3

**Protocol 1416-003, Brain Pathology Supplement**

This supplement clarifies some of the procedures to be followed in the collection and processing of brain tissue from the rats on this study. The supplement is divided into six parts - group size, tissue fixation and collection, gross dissection, histo-technical procedures, morphometric evaluation, and image capture/archiving.

**Group Size**: Brains will be collected from 16 rats/sex in each of the dosage groups excepting for the control group (*i.e.* one rat/sex from each litter). All available control rat brains will be collected.

**Tissue Fixation and Collection**: For gestational day 21 and postpartum day 5 rats, the calvaria will be removed and the heads placed into Bouin's fixative for at least 48 hours, after which the heads will be rinsed in two changes of 50 percent ethanol and then placed into ten percent neutral buffered formalin for additional fixation and storage. For the day 10 and day 22 postpartum rats, the calvaria will be removed and the heads placed into ten percent neutral buffered formalin for fixation and storage.

**Gross Dissection**: In the initial phase of this study, brains will be processed and evaluated only from the day 10 and day 22 postpartum rats. Depending upon the results of this initial valuation, a decision will be made *re:* whether to also examine the brains of the postpartum day 5 and gestational day 21 rats. Initially, only the brains from the high dosage groups (along with an equal number of age-matched control group rat brains), will be dissected and processed for microscopic evaluation. If the results of the microscopic evaluations on these rat brains should indicate that brains from rats in the lower dosage groups also need to be evaluated, additional control group rat brains will also be dissected and processed at the same time as these other brains. Standardized coronal sections will be taken from the brains of the rats killed on postpartum days 5,10, and 22. Sagittal sections will be prepared from the gestational day 21 rat brains. (Note: The landmarks for these sagittal sections are not elaborated in this supplement.)

There will be five paraffin-embedded tissue blocks (and five or more slides) for each of the brains from rats killed on postpartum days 5,10, and 22. The first four of these blocks will be step-sectioned, with there being approximately 60 micrometers between each of the step sections. The brain slices in the blocks to be step-sectioned will be taken from the following locations: 1) level of the optic chiasm; 2) level of the infundibulum; 3) level of the mammillary body; 4) midpoint of the cerebellum. All remaining brain sections (with the number of these extra sections varying depending upon the age of the rats) will be multiply embedded within the fifth tissue block. This fifth block will not be step-sectioned. All sections will be embedded with their anterior faces down in the block (*i.e.* representing the faces to be sectioned) with the exception of the olfactory bulbs. These will be embedded lengthwise (for a sagittal section).

**Histo-technical Procedures**: The brain sections from the postpartum day 10 rats will be stained with hematoxylin and eosin. The brain sections from the postpartum day 22 rats will be stained with hematoxylin and eosin, as well as with luxol fast blue/cresyl violet (for myelin as well as cell bodies).

**Morphometric Evaluation**: Multiple linear measurements will be performed on three of the four step-sectioned coronal brain slices using a calibrated ocular micrometer. The following linear measurements will be taken from the specified coronal sections:

Level of the optic chiasm:

1) Thickness of the frontal cortex of the cerebrum.
2) Thickness of the parietal cortex of the cerebrum.
3) Diagonal width of the caudate putamen and underlying globus pallidus.
4) Thickness of the corpus callosum taken at the level of the external granular layer of the overlying cingulate cortex.

Level of the infundibulum:

5) Thickness of the hippocampus at the level of the dentate gyrus, extending from its ventral aspect (adjacent to the thalamus) over to the alveus hippocampus.
6) Thickness of the granule neuron layer of the dentate gyrus.
7) Thickness of the CA1 pyramidal neuron layer.
8) Thickness of the CA3 pyramidal neuron layer.

Level of the midpoint of the cerebellum:

9) Maximal thickness of the cerebellar cortex at the midline, extending from the roof of the fourth ventricle to the superior surface of the cerebellar cortex. This measurement will be taken in a section which includes the deep cerebellar nuclei.
10) Thickness of the external germinal layer of the cerebellum (postpartum day 10 rats, but not the postpartum day 22 rats).

All measurements, excepting for #9 and #10, will be taken from both the left side and right side of the respective brain section and these measurements recorded separately in order to judge the degree of variation by side. For measurement #9, approximately six separate measurements will be taken across the superior aspect of the cerebellar cortex. Although all of these thicknesses (of the external germinal layer) will be recorded, only the mean value will be used for statistical evaluation.

**Image Capture/Archiving**: At the same time that the microscopic measurements are performed, full-face images of the coronal brain slices will be captured digitally using a PathScan Enabler and a Polaroid SprintScan 35 film scanner. The brain sections will be scanned at a resolution of 2700 dpi and saved as "tiff" files. These digital images will be archived on a CD-R disc and will be available for evaluation of consistency of section level or

for additional measurement (directly on a computer monitor, with an image analysis program, or on an image print-out). "Thumbnail" images of these digitized coronal slices will be included with the raw data (or, if desired, placed in the report.) One of the archived images will include lines showing the location and angle of the linear measurements that have been taken. In addition, the level of each forebrain image will be referenced according to the plates presented in *A Stereotaxic Atlas of the Developing Rat Brain* by Nancy M. Sherwood and Paola S. Timiras (University of California Press, 1970).

PRIMEDICA

Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
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Telephone: (215) 443-8710
Telefax: (215) 443-8587

PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 2 - 8 February 2000

1. Neonatal Blood and Tissue Sample Collection - Parts B and C (page 19 of the protocol):

   [Effective Date: 4 February 2000] Blood samples for evaluation of thyroid hormones will be collected by cardiac puncture following carbon dioxide asphyxiation for the pups sacrificed on day 5 postpartum.

   Reason for Change:

   This change was made to accommodate the volume of blood requested by the Sponsor.

08-FEB-00
for Alan M. Hoberman, Ph.D., DABT Date
Director of Research

08-FEB-00
Raymond G. York, Ph.D., DABT Date
Associate Director of Research
Study Director

08-FEB-00
for Dena C. Lebo, V.M.D. Date
Chairperson, Institutional Animal Care and Use Committee

FEB 16 2000
Michael F. Girard Date
Study Monitor

2/9/00
Michael L. Dourson, Ph.D., DABT Date
Scientific Advisor

PRIMEDICA

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PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 3 - 7 March 2000

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1. Neonatal Blood and Tissue Sample Collection - Parts B and C (page 19 of the protocol):

   [Effective Date: 10 February 2000] Blood samples for evaluation of thyroid hormones will be collected by cardiac puncture following carbon dioxide asphyxiation for the pups sacrificed on day 10 postpartum.

   Reason for Change:

   This change was made to accommodate the volume of blood requested by the Sponsor.

2. Randomization and Cohabitation (page 9 and ATTACHMENT 1 to the protocol):

   Following 15 days, rather than 2 weeks, of exposure to the test substance, the female rats in Part D will be cohabited with breeder male rats, one male rat per female rat. The new schedule will be as follows:

**Any revisions to this finalized amendment must be made by subsequent amendment.**

| | |
|---|---|
| 25 JAN 00 | Animal Receipt - Acclimation Begins. |
| 31 JAN 00 | Initiation of Test Substance Exposure (Two weeks prior to cohabitation and continuing through the day before sacrifice). |
| 14 FEB 00 PM - 19 FEB 00 AM | Cohabitation Period. |
| 15 FEB 00 | First Possible Day 0 of Presumed Gestation. |
| 19 JAN 00 | Last Possible Day 0 of Presumed Gestation. |
| 07 MAR 00 | First Possible Day 21 of Presumed Gestation Caesarean-sectioning. |
| 11 MAR 00 | Last Possible Day 21 of Presumed Gestation Caesarean-sectioning. |
| 01 JUN 00 | Draft Final Report. |

Reason for Change:

To facilitate laboratory scheduling so that cohabitation is started on a Monday instead of a Sunday.

**Any revisions to this finalized amendment must be made by subsequent amendment.**

3. Shipment of Maternal Thyroid Tissue Samples (page 17 of the protocol):

The correct address for Kathleen Funk is as follows:

Kathleen Funk, D.V.M., Ph. D.
Experimental Pathology Laboratories, Inc.
22866 Shaw Road
Sterling, Virginia 20166
Telephone: (703) 471-7060 Ext. 206
Telefax: (703) 471-8447
E-Mail: kfunk@epl-inc.com

Reason for Change:

This change corrects a typographical error in the protocol.

Alan M. Hoberman, Ph.D., DABT Date
Director of Research

Raymond G. York, Ph.D., DABT Date
Associate Director of Research
Study Director

Dena C. Lebo, V.M.D. Date
Chairperson, Institutional Animal Care and Use Committee

Michael F. Girard Date
Study Monitor

Michael L. Dourson, Ph.D., DABT Date
Scientific Advisor

**Any revisions to this finalized amendment must be made by subsequent amendment.**

PRIMEDICA

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PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 4 - 15 March 2000

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1. Randomization and Cohabitation (ATTACHMENT 1 and Amendment 3 to the protocol):

   The female rats in Part D will be cohabited with breeder male rats, one male rat per female rat until at least 20 pregnant females are allocated to each exposure group. The new schedule will be as follows:

| | |
|---|---|
| 25 JAN 00 | Animal Receipt - Acclimation Begins. |
| 31 JAN 00 | Initiation of Test Substance Exposure (Two weeks prior to cohabitation and continuing through the day before sacrifice). |
| 14 FEB 00 PM - 23 FEB 00 AM | Cohabitation Period. |
| 15 FEB 00 | First Possible Day 0 of Presumed Gestation. |
| 23 FEB 00 | Last Possible Day 0 of Presumed Gestation. |
| 07 MAR 00 | First Possible Day 21 of Presumed Gestation Caesarean-sectioning. |
| 15 MAR 00 | Last Possible Day 21 of Presumed Gestation Caesarean-sectioning. |
| 01 JUN 00 | Draft Final Report. |

**Any revisions to this finalized amendment must be made by subsequent amendment.**

Reason for Change:

To ensure enough pregnant females will be available for the study.

15 MAR 00 — 15-MAR-00

Alan M. Hoberman, Ph.D., DABT Date
Director of Research

Raymond G. York, Ph.D., DABT Date
Associate Director of Research
Study Director

15 MAR 00 — 27 MAR 00

Dena C. Lebo, V.M.D. Date
Chairperson, Institutional Animal Care and Use Committee

Michael F. Girard Date
Study Monitor

3-15-00

Michael L. Dourson, Ph.D., DABT Date
Scientific Advisor

**Any revisions to this finalized amendment must be made by subsequent amendment.**

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PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 5 - 20 April 2000

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1. Final Report (page 24 of the protocol):

The final report will be issued as two stand-alone GLP compliant reports. One report will retain the original study title and will present the methodology and results from Parts A, B and C of the study. The other report will be entitled "Oral (Drinking Water) Developmental Toxicity Study of Ammonium Perchlorate in Rats" and will present the methodology and results from Part D of the study. Mail dates for both draft reports remain June 1, 2000.

Reason for Change:

This change was made at the Sponsor's request.

20 APR 00
Alan M. Hoberman, Ph.D., DABT Date
Director of Research

20 APR 00
Raymond G. York, Ph.D., DABT Date
Associate Director of Research
Study Director

20 APR 00
for Dena C. Lebo, V.M.D. Date
Chairperson, Institutional Animal Care and Use Committee

28 APR 00
Michael F. Girard Date
Study Monitor

21 April 00
Michael L. Dourson, Ph.D., DABT Date
Scientific Advisor

**Any revisions to this finalized amendment must be made by subsequent amendment.**

PRIMEDICA

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PROTOCOL 1416-003

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

Amendment 6 - 7 July 2000

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1. Test Substance (page 4 of the protocol):

   The Ammonium Perchlorate (CAS Number 7790-98-9), lot number 03907LF, was obtained from Aldrich Chemical Company, Milwaukee, Wisconsin.

   Reason for Change:

   The source and lot number were to be documented by amendment.

2. Randomization and Cohabitation (page 9 of the protocol):

   [Effective Date: 19 January 2000] The cohabitation period for Part B of the study will consist of a maximum of ten days, rather than five days.

   Reason for Change:

   The cohabitation period for was extended in order to provide a sufficient number of pregnant rats for Part B of the study.

3. Data Acquisition, Verification and Storage (page 23 of the protocol):

   [Effective Date: 22 December 1999] The *Primedica Argus Reproductive and Developmental Toxicology Data Collection System* was used to collect, tabulate, summarize and statistically analyze data, rather than the *Argus Reproductive and Developmental Toxicology Data Collection System*.

   Reason for Change:

   This change corrects the protocol.

4. Procedure for Histopathology of the Thyroid Gland (ATTACHMENT 6 and Amendment 1 to the protocol):

The Procedure for Histopathology of the Thyroid Gland in Amendment 1 has been replaced by the appended ATTACHMENT 6.

Reason for Change:

This change was added by the Veterinary Pathologist.

5. ATTACHMENT 7 to the Protocol; Brain Pathology Supplement and Procedure for Histopathology of the Thyroid Gland (page 4 of Amendment 1 to the protocol):

Conduct of neurohistological/morphological evaluations of fetal brains will be added for the lower dosage groups, beginning with Group IV (1.0 mg/kg/day) and continuing down until a no-effect level is determined.

Reason for Change:

Additional evaluations were required based on the results of evaluations of fetal brains for the high dosage group (30.0 mg/kg/day).

7 Jul-00
Alan M. Hoberman, Ph.D., DABT — Date
Director of Research

07-JUL-00
Raymond G. York, Ph.D., DABT — Date
Associate Director of Research
Study Director

07 Jul 00
Dena C. Lebo, V.M.D. — Date
Chairperson, Institutional Animal Care and Use Committee

23 JUL 00
Michael F. Girard — Date
Study Monitor

17/7/00
Michael L. Dourson, Ph.D., DABT — Date
Scientific Advisor

**Any revisions to this finalized amendment must be made by subsequent amendment.**

# Procedure for Histopathology of the Thyroid Gland

## I. Histopathology

### *A. Colloid*

1. Coded as DECREASED COLLOID based on either:
   a. Grade % of follicles affected
      1. 1-10
      2. 11-50
      3. 51-100

### *B. Follicular Cell Hypertrophy*

1. Diagnosed separately from follicular cell hyperplasia and based on size of the cell (cytoplasmic to nuclear ratio)
   a. Grading scale 1-3 where 1=minimal, 2=mild, 3=moderate to severe

### *C. Follicular Cell Hyperplasia*

1. Only diagnosed when there is either stratification (multiple layers) or papillary infolding of single or multiple layers of follicular cells. Follicles at the perimeter of the examined thyroid lobes were generally excluded.

2. Coded as AREA AFFECTED
   a. Grade % of Follicles Affected
      1. 1-10
      2. 11-50
      3. 51-100

3. Coded as OVERALL SEVERITY
   a. The average severity of all the <u>affected</u> follicles with follicular cell hyperplasia.
   b. Grading scale 1-3 where 1=minimal, 2=mild, 3=moderate to severe.

4. Coded as GREATEST SEVERITY
   a. The severity grade given to the follicle with the most follicular cell hyperplasia. The severity of the follicular cell hyperplasia based on the complexity of the pattern of hyperplasia and/or multiplicity within the affected thyroid gland follicle.

b. Grade description
   1. Simple papillary infolding of follicular epithelium usually with a capillary in its core.
   2. Multiple papillary infolding with or without stratification of the follicular epithelium in other parts of the same thyroid follicle.
   3. Hyperplasia of the follicular epithelium having a complex pattern (eg, microfollicular pattern or extensive branching). The follicular cells may appear more basophilic. There is no compression due to the hyperplasia. Generally smaller and less complex than the follicular cell adenomas.

c. Example: If follicular cell hyperplasia is seen in 8 follicles (4 of minimal severity, 2 of mild severity and 2 of moderate severity):

   Area Affected = 1%=1
   Overall Severity = 2 (rounded up from 1.75)
   Greatest Severity = 3

# APPENDIX F

## DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILITY

## DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILITY

1. The rats were given the test substance or carrier until the day of sacrifice rather than allowing access until the day before sacrifice. The dates of sacrifice that rats were exposed included:

| Study Segment | Type of Sacrifice | Dates |
|---|---|---|
| Part A | Caesarean-Sectioning [(day 21 of gestation (DG 21)] | 01 FEB 00 - 04 FEB 00 |
| Part B | DG 25 | 09 FEB 00 - 12 FEB 00 |
| | Scheduled sacrifice -DL 10 | 14 FEB 00 - 22 FEB 00 |
| Part C | DG 25 | 06 FEB 00 - 08 FEB 00 |
| | Scheduled sacrifice - DL 22 | 22 FEB 00 - 26 FEB 00 |

This deviation did not affect the outcome or interpretation of the study because the regulatory guidelines allow exposure up to the day of sacrifice.

2. On 01 February 2000 through 04 February 2000 (Part A), 06 February 2000 through 09 February (Part C) and 15 February 2000 through 18 February 2000 (Part B), dams and fetuses/pups selected for tissue collection (Part A) and subsequent histopathological analysis [Part B and C, day 5 of lactation (DL 5)] were not selected randomly. This deviation did not affect the outcome or interpretation of the study because it occurred across all dosage groups.

3. On 19 February 2000, (DL 15), Part C rat 16789 in the 0.1 mg/kg/day dosage group was sacrificed and discarded without evaluation due to having fewer than 12 pups per litter at the time of blood collection on DL 5. However, there were fewer than 16 dams in this group that met the criteria for selection (12 or more pups per litter). This dam should have been retained in order to keep the group size at 16. This deviation did not affect the outcome or interpretation of the study because sufficient litters were available for evaluation.

4. In order to meet protocol required number of fetuses/pups for sample collection it was necessary to sacrifice and evaluate additional dams. Therefore, more dams than initially required by the protocol were evaluated since Caesarean-sections and deliveries for Parts A, B and C occurred over a 13 day period (1 February 2000 through 13 February 2000). This deviation did not affect the outcome or interpretation of the study because the correct number of fetuses/pups per group were selected for sample collection.

5. Concentrations of the test substance formulations prepared on 5 January 2000 and 12 January 2000, were adjusted based on average water consumption values from female rats of comparable weights from a study previously conducted by the Sponsor at this Testing Facility (1416-001), rather than from the summarized water consumption data from the previous week. The latter data was not available at the time of test substance preparation. These deviations did not affect the outcome or interpretation of the study because the actual consumed dosages during this period (beginning of gestation for Parts A and C and the last week of the precohabitation period for Part B) were at approximately the target dosage levels.

6. It was not possible to summarize feed consumption data for the following intervals because of spilled feed or incorrectly or not recorded feed consumption values for the following rats. These deviations did not affect the outcome or interpretation of the study because sufficient data were collected to evaluate this parameter.

Part A

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 1-7 | - | - | - | 16575 | 16601 |
| Gestation | | | | | |
| DG 6-9 | - | - | - | - | 16601 |

DS = Day of Study, DG = Day of Gestation

Part B

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 7-14 | - | 16659 | 16683 | 16696 | - |
| DS 1-14 | - | 16659 | 16683 | 16696 | - |
| Gestation | | | | | |
| DG 0-6 | - | - | - | 16693 | - |
| DG 6-9 | - | - | - | 16693 | - |
| Lactation | | | | | |
| DL 1-4 | - | 16645, 16659 | 16683 | 16695 | - |
| DL 4-7 | - | 16645 | 16662 | - | - |
| DL 7-14 | - | 16645, 16646 | 16683 | - | 16730 |

| | | | | | |
|---|---|---|---|---|---|
| DL 1-14 | - | 16645, 16646 | 16683 | - | 16730 |

DS = Day of Study, DG = Day of Gestation, DL = Day of Lactation

Part C

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 1-7 | - | - | - | 16817 | 16828 |
| DS 7-14 | - | - | 16789 | - | - |
| DS 1-14 | - | - | 16789 | - | - |
| Lactation | | | | | |
| DL 1-4 | - | - | - | - | 16831 |
| DL 4-7 | - | - | 16797 | - | - |

DS = Day of Study, DG = Day of Gestation, DL = Day of Lactation

7. It was not possible to summarize water consumption data for the following intervals because of spilled water or incorrectly or not recorded water consumption values for the following rats. These deviations did not affect the outcome or interpretation of the study because sufficient data were collected to evaluate this parameter.

Part A

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 1-7 | - | - | - | 16589 | 16602 |
| DS 7-14 | - | 16527 | - | 16580, 16587, 16589 | 16602, 16615 |
| DS 1-14 | - | - | - | 16580, 16587, 16589 | 16602, 16615 |
| Gestation | | | | | |
| DG 0-6 | - | 16532 | 16560 | 16589 | - |
| DG 6-9 | - | 16532 | 16560 | 16584, 16589 | - |
| DG 9-12 | - | 16532 | 16553, 16560 | 16580, 16584, 16589 | 16606 |
| DG 12-15 | - | 16532 | 16553, 16557, 16559, 16560, 16565 | 16580, 16584, 16587, 16589 | 16602 |
| DG 15-18 | 16506 | 16532, 16546 | 16559, 16560 | 16580, 16581, 16584, 16589 | 16611 |
| DG 18-21 | - | 16532 | 16560 | - | - |

| | | | | | |
|---|---|---|---|---|---|
| DG 0-21 | - | 16532 | 16560 | - | - |

DS = Day of Study, DG = Day of Gestation

## Part B

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 1-7 | 16630, 16638 | 16643, 16651 | 16668 | 16696 | 16723, 16728 |
| DS 7-14 | 16630, 16634, 16638 | 16651 | 16670 | 16693, 16696, 16707 | 16713, 16714 |
| DS 1-14 | 16630, 16634, 16638 | 16651 | 16670 | 16693, 16696, 16707 | 16713, 16714 |
| Gestation | | | | | |
| DG 0-6 | 16630, 16634 | 16640 | 16670 | 16685, 16696 | - |
| DG 6-9 | 16630, 16634 | 16640, 16644 | - | 16685, 16696 | - |
| DG 9-12 | 16617, 16630, 16634 | 16654 | 16670, 16683 | 16685, 16688, 16696 | 16712 |
| DG 12-15 | 16630, 16634 | - | 16669, 16678 | 16685 | 16730 |
| DG 15-18 | 16634 | - | 16678 | 16696 | 16717 |
| DG 18-20 | 16635 | 16655 | 16670 | - | - |
| DG 0-20 | 16635 | 16655 | 16670 | - | - |
| Lactation | | | | | |
| DL 1-4 | 16630, 16634 | - | - | - | - |
| DL 4-7 | 16620, 16629, 16630 | - | - | 16685 | 16725 |
| DL 7-10 | - | - | - | - | - |
| DL 1-10 | - | - | - | - | - |

DS = Day of Study, DG = Day of Gestation, DL = Day of Lactation

Part C

| | Group I 0 mg/kg/day | Group II 0.01 mg/kg/day | Group III 0.1 mg/kg/day | Group IV 1.0 mg/kg/day | Group V 30.0 mg/kg/day |
|---|---|---|---|---|---|
| Interval | Rat Number | Rat Number | Rat Number | Rat Number | Rat Number |
| Precohabitation | | | | | |
| DS 1-7 | - | - | 16789, 16797 | - | 16836 |
| DS 7-14 | 16745 | 16765 | - | 16803, 16808, 16810 | 16823, 16836 |
| DS 1-14 | 16745 | 16765 | - | 16803, 16808, 16810 | 16823, 16836 |
| Gestation | | | | | |
| DG 0-6 | 16749 | 16765, 16774 | 16797 | 16803 | 16830, 16836 |
| DG 6-9 | 16732 | 16764, 16765 | 16797 | - | - |
| DG 9-12 | 16736, 16745 | 16760, 16764, 16765, 16774 | 16797 | 16803, 16815 | 16831, 16836 |
| DG 12-15 | 16736, 16745 | 16764, 16765, 16773 | 16783, 16795, 16797 | 16803, 16805, 16810 | 16823, 16836 |
| DG 15-18 | 16732, 16745, 16746 | 16765, 16768, 16773, 16774 | 16792, 16797 | 16815 | 16836 |
| DG 18-20 | 16734, 16746 | - | 16784, 16786, 16792 | 16815 | 16826 |
| DG 0-20 | 16734, 16746 | - | 16784, 16786, 16792 | 16815 | 16826 |
| Lactation | | | | | |
| DL 1-4 | 16734 | 16758, 16764 | - | - | - |
| DL 4-7 | - | - | 16797 | - | - |
| DL 7-14 | - | 16758 | 16797 | - | 16826 |
| DL 1-14 | - | 16758 | 16797 | - | 16826 |

DS = Day of Study, DG = Day of Gestation, DL = Day of Lactation

8. On 6, 8, 9, 24, 25, 26 February 2000 (Part C) and on 12 February (Part B) 2000, DLs 5, 10 and 22 various blood samples were collected in the afternoon. These deviations did not affect the outcome or interpretation of the study because the majority of the dams/pups were bled in the morning and the data will be examined to compare the morning and afternoon hormone levels.

9. Serum samples designated for $T_3$ and $T_4$ analysis were analyzed for $T_4$ and $T_3$, respectively by Wright Patterson Air Force Base (WPAFB) because WPAFB reprioritized the sample analysis. These deviations did not affect the outcome or interpretation of the study because sufficient samples were available for analysis.

10. On 6 February 2000 through 9 February 2000 and 10 February 2000 through 13 February 2000 (DL 5), only one male and one female brain per litter was processed for the 0 (Carrier) mg/kg/day dosage groups for parts C and B, respectively. This deviation did not affect the outcome or interpretation of the study because control brains were collected from all pups and saved.

11. On 15 February 2000 through 18 February 2000 (DL 10), only one male and one female brain per litter was processed for the 0 (Carrier) mg/kg/day dosage groups for parts B. This deviation did not affect the outcome or interpretation of the study because control brains were collected from all pups and saved.

12. On 23 February 2000 through 26 February 2000 (DL 22), only one male and one female brain per litter was processed for the 0 (Carrier) mg/kg/day dosage groups for part C. This deviation did not affect the outcome or interpretation of the study because control brains were collected from all pups and saved.

All deviations are available in the raw data.

14-MAR-01

Raymond G. York, Ph.D., DABT Date
Associate Director of Research
and Study Director

# APPENDIX G

# CERTIFICATE OF ANALYSIS

# CERTIFICATE OF ANALYSIS

PO NBR:

ARGUS RESEARCH LABS
TRISH KELLY
FAX 215 443 8587

PRODUCT NUMBER: 20850-7 LOT NUMBER: 03907LF

PRODUCT NAME: AMMONIUM PERCHLORATE, 99.8%

FORMULA: NH4CLO4 FORMULA WEIGHT: 117.49

| | |
|---|---|
| APPEARANCE | WHITE POWDER |
| X-RAY DIFFRACTION PATTERN | CONFORMS TO STANDARD PATTERN. |
| TITRATION | 0.05 % H2O |
| TRACE ANALYSIS, ICP | CA 660 PPM<br>P 260 PPM<br>NA 50 PPM<br>MG 6 PPM<br>BA 4 PPM<br>SR 0.4 PPM |

ALDRICH CHEMICAL COMPANY
DAVID SWESSEL
JUNE 2, 2000

chemists helping chemists in research & industry
aldrich chemical co.
P.O. Box 355, Milwaukee, Wisconsin 53201 USA • (414) 273-3850 • FAX (414) 273-4979

ALDRICH warrants that its products conform to the information contained in this and other Aldrich publications. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

016 REV-11/92

# APPENDIX H

# ENVIRONMENTAL AND HUSBANDRY REPORTS

# ARGUS

## Temperature and Relative Humidity Report
## Location: Room 23

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 31-Jan-2000 14:59**

| | Temperature | | Relative Humidity | |
|---|---|---|---|---|
| **Target Range:**<br>**Species:** RAT | 64°F to 79°F | | 30% to 70% | |
| **Total Number of Days:** | 42 | | 42 | |
| **Total Number of Hours:** | 984.75 | | 984.75 | |
| **Total Number of Data Points:** | 977 | | 977 | |
| **Mean (± SD):** | 70.9 | (± 0.5) | 52.1 | (± 1.9) |
| **Maximum:** | 72.2 | | 59.6 | |
| **Median:** | 70.9 | | 51.9 | |
| **Minimum:** | 69.0 | | 45.2 | |
| **Number of Points in Range (%):** | 977 | (100.0) | 977 | (100.0) |
| **Number of Points High (%):** | 0 | (0.0) | 0 | (0.0) |
| **Number of Points Low (%):** | 0 | (0.0) | 0 | (0.0) |

**Report Generated:** 18-May-2000 at 09:33

**COMMENTS:** _____

**REVIEWED BY:** C. Cabe **DATE:** 5-18-00

# ARGUS

## Temperature and Relative Humidity Report
## Location: Room 14

## Protocol Number: 1416003

**Range of Dates: 31-Jan-2000 14:10 to 04-Feb-2000 08:59**

| | Temperature | | Relative Humidity | |
|---|---|---|---|---|
| **Target Range:** | 64°F to 79°F | | 30% to 70% | |
| **Species:** RAT | | | | |
| **Total Number of Days:** | 5 | | 5 | |
| **Total Number of Hours:** | 90.5 | | 90.5 | |
| **Total Number of Data Points:** | 90 | | 90 | |
| **Mean (± SD):** | 70.3 | (± 0.3) | 57.7 | (± 1.2) |
| **Maximum:** | 71.5 | | 60.4 | |
| **Median:** | 70.3 | | 57.9 | |
| **Minimum:** | 69.5 | | 53.6 | |
| **Number of Points in Range (%):** | 90 | (100.0) | 90 | (100.0) |
| **Number of Points High (%):** | 0 | (0.0) | 0 | (0.0) |
| **Number of Points Low (%):** | 0 | (0.0) | 0 | (0.0) |

**Report Generated:** 18-May-2000 at 09:35

**COMMENTS:** _____

**REVIEWED BY:** C. Calv **DATE:** 5-18-00

# ARGUS

## Temperature and Relative Humidity Report
## Location: Room 24

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 22-Feb-2000 07:59**

| | Temperature | | Relative Humidity | |
|---|---|---|---|---|
| **Target Range:** | 64°F to 79°F | | 30% to 70% | |
| **Species:** RAT | | | | |
| **Total Number of Days:** | 64 | | 64 | |
| **Total Number of Hours:** | 1505.74 | | 1505.74 | |
| **Total Number of Data Points:** | 1497 | | 1497 | |
| **Mean (± SD):** | 69.8 | (± 2.0) | 49.4 | (± 7.7) |
| **Maximum:** | 100.0 | | 75.0 | |
| **Median:** | 69.7 | | 48.5 | |
| **Minimum:** | 66.7 | | 22.3 | |
| **Number of Points in Range (%):** | 1489 | (99.5) | 1432 | (95.7) |
| **Number of Points High (%):** | 8 | (0.5) | 7 | (0.5) |
| **Number of Points Low (%):** | 0 | (0.0) | 58 | (3.9) |

**Report Generated:** 18-May-2000 at 09:40

**COMMENTS:** _____

**REVIEWED BY:** C Cahn **DATE:** 5-18-00

# ARGUS

## Temperature Deviations Report
## Location: Room 24

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 22-Feb-2000 07:59**

**Temperature Target Range:** 64°F to 79°F
**Species:** RAT

| Date | Time | Temp. | Date | Time | Temp. |
|---|---|---|---|---|---|
| 10-Feb-2000 | 14:00 | 84.6 H | | | |
| 16-Feb-2000 | 09:00 | 84.4 H | | | |
| 16-Feb-2000 | 10:00 | 100.0 H (1) | | | |
| 16-Feb-2000 | 11:00 | 100.0 H (1) | | | |
| 16-Feb-2000 | 12:00 | 100.0 H (1) | | | |
| 16-Feb-2000 | 13:00 | 100.0 H (1) | | | |
| 16-Feb-2000 | 14:00 | 100.0 H (1) | | | |
| 16-Feb-2000 | 15:00 | 85.0 H | | | |

**H = Value out of range - High L = Value out of range - Low**
**Temp. = Temperature °F**

**Report Generated:** 18-May-2000 at 09:46

✓ These deviations did not adversely affect the outcome or interpretation of the study.

_____ The following deviation(s) impacted on the outcome of the study as described:

Study Director: [signature] Date: 31-MAY-00

(1) False temperature recordings as indicated by facility deviation. JB 5/31/00

**ARGUS**

**Relative Humidity Deviations Report**
**Location: Room 24**

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 22-Feb-2000 07:59**

**Humidity Target Range:** 30% to 70%
**Species:** RAT

| Date | Time | R.H. | Date | Time | R.H. |
|---|---|---|---|---|---|
| 04-Jan-2000 | 07:00 | 72.4 H | 14-Jan-2000 | 19:00 | 24.5 L |
| 13-Jan-2000 | 21:00 | 29.2 L | 14-Jan-2000 | 20:00 | 24.6 L |
| 13-Jan-2000 | 22:00 | 27.5 L | 14-Jan-2000 | 21:00 | 23.8 L |
| 13-Jan-2000 | 23:00 | 27.0 L | 14-Jan-2000 | 22:00 | 24.1 L |
| 14-Jan-2000 | 00:00 | 27.5 L | 14-Jan-2000 | 23:00 | 24.3 L |
| 14-Jan-2000 | 01:00 | 27.7 L | 15-Jan-2000 | 00:00 | 24.3 L |
| 14-Jan-2000 | 02:00 | 27.1 L | 15-Jan-2000 | 01:00 | 23.9 L |
| 14-Jan-2000 | 03:00 | 26.1 L | 15-Jan-2000 | 02:00 | 24.1 L |
| 14-Jan-2000 | 04:00 | 25.5 L | 15-Jan-2000 | 03:00 | 24.7 L |
| 14-Jan-2000 | 05:00 | 25.7 L | 15-Jan-2000 | 04:00 | 25.4 L |
| 14-Jan-2000 | 06:00 | 25.5 L | 15-Jan-2000 | 05:00 | 24.7 L |
| 14-Jan-2000 | 07:00 | 25.0 L | 15-Jan-2000 | 06:00 | 24.8 L |
| 14-Jan-2000 | 08:00 | 24.5 L | 15-Jan-2000 | 07:00 | 25.2 L |
| 14-Jan-2000 | 09:00 | 24.1 L | 15-Jan-2000 | 08:00 | 26.0 L |
| 14-Jan-2000 | 10:00 | 25.8 L | 15-Jan-2000 | 09:00 | 27.5 L |
| 14-Jan-2000 | 11:00 | 25.9 L | 15-Jan-2000 | 10:00 | 27.8 L |
| 14-Jan-2000 | 12:00 | 27.7 L | 15-Jan-2000 | 11:00 | 29.9 L |
| 14-Jan-2000 | 13:00 | 27.0 L | 15-Jan-2000 | 12:00 | 29.3 L |
| 14-Jan-2000 | 14:00 | 26.1 L | 15-Jan-2000 | 19:00 | 29.7 L |
| 14-Jan-2000 | 15:00 | 26.4 L | 15-Jan-2000 | 20:00 | 28.8 L |
| 14-Jan-2000 | 16:00 | 26.0 L | 15-Jan-2000 | 21:00 | 28.8 L |
| 14-Jan-2000 | 17:00 | 25.2 L | 15-Jan-2000 | 22:00 | 28.1 L |
| 14-Jan-2000 | 18:00 | 25.3 L | 15-Jan-2000 | 23:00 | 27.7 L |

**H = Value out of range - High L = Value out of range - Low**
**R.H. = Relative Humidity (%)**

**Report Generated:** 18-May-2000 at 10:09

✓ These deviations did not adversely affect the outcome or interpretation of the study.

_____ The following deviation(s) impacted on the outcome of the study as described:

Study Director: [signature] Date: 31-MAY-00

# ARGUS

## Relative Humidity Deviations Report
## Location: Room 24

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 22-Feb-2000 07:59**

**Humidity Target Range:** 30% to 70%
**Species:** RAT

| Date | Time | R.H. | Date | Time | R.H. |
|---|---|---|---|---|---|
| 16-Jan-2000 | 00:00 | 29.1 L | | | |
| 16-Jan-2000 | 01:00 | 28.2 L | | | |
| 16-Jan-2000 | 02:00 | 29.0 L | | | |
| 16-Jan-2000 | 03:00 | 28.7 L | | | |
| 16-Jan-2000 | 04:00 | 28.9 L | | | |
| 16-Jan-2000 | 05:00 | 29.9 L | | | |
| 16-Jan-2000 | 18:00 | 29.6 L | | | |
| 16-Jan-2000 | 19:00 | 28.1 L | | | |
| 16-Jan-2000 | 20:00 | 27.2 L | | | |
| 16-Jan-2000 | 21:00 | 24.6 L | | | |
| 16-Jan-2000 | 22:00 | 23.7 L | | | |
| 16-Jan-2000 | 23:00 | 22.3 L | | | |
| 17-Jan-2000 | 00:00 | 22.5 L | | | |
| 16-Feb-2000 | 10:00 | 75.0 H | | | |
| 16-Feb-2000 | 11:00 | 75.0 H | | | |
| 16-Feb-2000 | 12:00 | 75.0 H | | | |
| 16-Feb-2000 | 13:00 | 75.0 H | | | |
| 16-Feb-2000 | 14:00 | 75.0 H | | | |
| 16-Feb-2000 | 15:00 | 70.5 H | | | |

**H = Value out of range - High L = Value out of range - Low**
**R.H. = Relative Humidity (%)**

**Report Generated:** 18-May-2000 at 10:13

✓ These deviations did not adversely affect the outcome or interpretation of the study.

_____ The following deviation(s) impacted on the outcome of the study as described:

Study Director: _____ Date: 31-MAY-00

# ARGUS

## Temperature and Relative Humidity Report
## Location: Room 25

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 26-Feb-2000 11:59**

| | Temperature 64°F to 79°F | | Relative Humidity 30% to 70% | |
|---|---|---|---|---|
| **Target Range:** | | | | |
| **Species:** RAT | | | | |
| **Total Number of Days:** | 68 | | 68 | |
| **Total Number of Hours:** | 1605.75 | | 1605.75 | |
| **Total Number of Data Points:** | 1597 | | 1597 | |
| **Mean (± SD):** | 69.6 | (± 2.1) | 52.7 | (± 3.8) |
| **Maximum:** | 100.7 | | 75.4 | |
| **Median:** | 69.7 | | 52.4 | |
| **Minimum:** | 65.1 | | 42.1 | |
| **Number of Points in Range (%):** | 1589 | (99.5) | 1592 | (99.7) |
| **Number of Points High (%):** | 8 | (0.5) | 5 | (0.3) |
| **Number of Points Low (%):** | 0 | (0.0) | 0 | (0.0) |

**Report Generated:** 18-May-2000 at 10:22

**COMMENTS:** _____

**REVIEWED BY:** C. Carlin **DATE:** 5·18·00

# ARGUS

## Temperature Deviations Report
## Location: Room 25

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 26-Feb-2000 11:59**

**Temperature Target Range:** 64°F to 79°F
**Species:** RAT

| Date | Time | Temp. | Date | Time | Temp. |
|---|---|---|---|---|---|
| 10-Feb-2000 | 14:00 | 84.7 H | | | |
| 16-Feb-2000 | 09:00 | 84.6 H | | | |
| 16-Feb-2000 | 10:00 | 100.0 H ① | | | |
| 16-Feb-2000 | 11:00 | 100.7 H ① | | | |
| 16-Feb-2000 | 12:00 | 100.0 H ① | | | |
| 16-Feb-2000 | 13:00 | 100.7 H ① | | | |
| 16-Feb-2000 | 14:00 | 100.0 H ① | | | |
| 16-Feb-2000 | 15:00 | 84.6 H | | | |

**H = Value out of range - High L = Value out of range - Low**
**Temp. = Temperature °F**

**Report Generated:** 18-May-2000 at 10:29

✓ These deviations did not adversely affect the outcome or interpretation of the study.

_____ The following deviation(s) impacted on the outcome of the study as described:

Study Director: [signature] Date: 31-MAY-00

① False temperature recordings as indicated by facility deviation SB 5/31/00
RGY 31-MAY-00

# ARGUS

## Relative Humidity Deviations Report
## Location: Room 25

**Protocol Number: 1416003**

**Range of Dates: 21-Dec-1999 13:56 to 26-Feb-2000 11:59**

**Humidity Target Range:** 30% to 70%
**Species:** RAT

| Date | Time | R.H. | Date | Time | R.H. |
|---|---|---|---|---|---|
| 16-Feb-2000 | 10:00 | 75.0 H | | | |
| 16-Feb-2000 | 11:00 | 75.0 H | | | |
| 16-Feb-2000 | 12:00 | 75.0 H | | | |
| 16-Feb-2000 | 13:00 | 75.4 H | | | |
| 16-Feb-2000 | 14:00 | 75.0 H | | | |

**H = Value out of range - High L = Value out of range - Low**
**R.H. = Relative Humidity (%)**

**Report Generated:** 18-May-2000 at 10:35

/ These deviations did not adversely affect the outcome or interpretation of the study.

_____ The following deviation(s) impacted on the outcome of the study as described:

Study Director: [signature] Date: 31-MAY-00

LabDiet. PMI NUTRITION INTERNATIONAL



Certified Analysis Retrieval

Product Code: 5002M Product Desc: CERTIFIED RODENT DIET MEAL
Lab Number: L9916286-1 Lot Code: SEP 26 99 1B Entered: 09/28/1999

| Assay | Analysis | Units |
|---|---|---|
| PROTEIN (N X 6.25) | 21.1 | % |
| FAT (ACID HYDRO.) | 5.59 | % |
| FIBER (CRUDE) | 4.3 | % |
| ARSENIC | LESS THAN 0.2 | PPM |
| CADMIUM | 0.082 | PPM |
| CALCIUM | 0.993 | % |
| LEAD | 0.18 | PPM |
| MERCURY | LESS THAN 0.025 | PPM |
| PHOSPHORUS | 0.699 | % |
| SELENIUM | 0.3261 | PPM |

| ORGANOPHOSPHATES | PPM | | PPM |
|---|---|---|---|
| Diazinon | LESS THAN 0.02 | Disulfoton | LESS THAN 0.02 |
| Ethion | LESS THAN 0.02 | Malathion | LESS THAN 0.02 |
| Methyl Parathion | LESS THAN 0.02 | Parathion | LESS THAN 0.02 |
| Thimet | LESS THAN 0.02 | Thiodan | LESS THAN 0.02 |
| Trithion | LESS THAN 0.02 | | |

Ellen Anderson 12/1/99
REVIEWED BY: DATE

| PESTICIDES AND PCB | PPM | | PPM |
|---|---|---|---|
| Aldrin | LESS THAN 0.02 | Alpha-BHC | LESS THAN 0.02 |
| Beta-BHC | LESS THAN 0.02 | Chlordane | LESS THAN 0.02 |
| DDE | LESS THAN 0.02 | DDT | LESS THAN 0.02 |
| Delta-BHC | LESS THAN 0.02 | Dieldrin | LESS THAN 0.02 |
| Endrin | LESS THAN 0.02 | HCB | LESS THAN 0.02 |
| Heptachlor | LESS THAN 0.02 | Heptachlor Epoxide | LESS THAN 0.02 |
| Lindane | LESS THAN 0.02 | Methoxychlor | LESS THAN 0.02 |
| Mirex | LESS THAN 0.02 | PCB | LESS THAN 0.15 |

| | | |
|---|---|---|
| Aflatoxin | Aflatoxins | LESS THAN 5 PPB |

For additional information, please contact:
(1) For assay methodology - Michael J. Murphy 314-982-2383
(2) For nutritional interpretation - Dr. Dorrance Haught 314-768-4362
(3) All other questions - Richmond,IN Manufacturing Plant 765-962-9561

The term "Less Than" is used to signify the lower limit of quantitation of the procedure under the conditions employed. The use of the term "Less Than" does not imply that traces of analyte were present.

LabDiet is a registered trademark of PMI Nutrition International. All certified products are manufactured under strict supervisor in our ISO 9002 drug and estrogen free plant in Richmond, Indiana.

Eric Anderson 12/1/99

REVIEWED BY: DATE

ARGUS 1416-003

Return to Certified Analysis Administration

Product Code: 5002M
Product Desc: CERTIFIED RODENT DIET MEAL
Lab Number: L9919495-3
Lot Code: NOV 22 99 3C
Entered: 11/24/99

| Assay | Analysis | Units |
|---|---|---|
| PROTEIN (N X 6.25) | 21.1 | % |
| FAT (ACID HYDRO.) | 5.64 | % |
| FIBER (CRUDE) | 4.51 | % |
| ARSENIC | LESS THAN 0.2 | PPM |
| CADMIUM | 0.061 | PPM |
| CALCIUM | 0.937 | % |
| LEAD | 0.181 | PPM |
| MERCURY | LESS THAN 0.025 | PPM |
| PHOSPHORUS | 0.629 | % |
| SELENIUM | 0.309 | ppm |

| ORGANOPHOSPHATES | PPM | ORGANOPHOSPHATES | PPM |
|---|---|---|---|
| Diazinon | LESS THAN 0.02 | Disulfoton | LESS THAN 0.02 |
| Ethion | LESS THAN 0.02 | Malathion | LESS THAN 0.02 |
| Methyl Parathion | LESS THAN 0.02 | Parathion | LESS THAN 0.02 |
| Thimet | LESS THAN 0.02 | Thiodan | LESS THAN 0.02 |
| Trithion | LESS THAN 0.02 | | |

| PESTICIDES AND PCB | PPM | PESTICIDES AND PCB | PPM |
|---|---|---|---|
| Aldrin | LESS THAN 0.02 | Alpha-BHC | LESS THAN 0.02 |
| Beta-BHC | LESS THAN 0.02 | Chlordane | LESS THAN 0.02 |
| DDE | LESS THAN 0.02 | DDT | LESS THAN 0.02 |
| Delta-BHC | LESS THAN 0.02 | Dieldrin | LESS THAN 0.02 |
| Endrin | LESS THAN 0.02 | HCB | LESS THAN 0.02 |
| Heptachlor | LESS THAN 0.02 | Heptachlor Epoxide | LESS THAN 0.02 |
| Lindane | LESS THAN 0.02 | Methoxychlor | LESS THAN 0.02 |
| Mirex | LESS THAN 0.02 | PCB | LESS THAN 0.15 |

| | | |
|---|---|---|
| Aflatoxin | Aflatoxin | LESS THAN 5 PPB |

No notes.

Ellis Anderson 1/12/00

REVIEWED BY: DATE

For additional information, please contact:
1) Michael J. Murphy at (314) 982-2383 -- for assay methodology
2) Dr. Dorrance Haught at (314) 768-4362 -- for nutritional interpretation
3) Richmond, IN Sales Office at (765) 962-9561 -- all other questions

ARGUS 1416-003

LabDiet

PMI NUTRITION
INTERNATIONAL



rtified Analysis Retriev

Product Code: 5002 Product Desc: CERTIFIED RODENT DIET CHECKERS
Lab Number: L9913400-5 Lot Code: AUG 04 99 2B Entered: 08/05/1999

| Assay | Analysis | Units |
|---|---|---|
| PROTEIN (N X 6.25) | 21.7 | % |
| FAT (ACID HYDRO.) | 5.82 | % |
| FIBER (CRUDE) | 3.48 | % |
| ARSENIC | 0.2311 | PPM |
| CADMIUM | 0.093 | PPM |
| CALCIUM | 0.8681 | % |
| LEAD | 0.212 | PPM |
| MERCURY | LESS THAN 0.025 | PPM |
| PHOSPHORUS | 0.767 | % |
| SELENIUM | 0.3786 | PPM |

| ORGANOPHOSPHATES | PPM | | PPM |
|---|---|---|---|
| Diazinon | LESS THAN 0.02 | Disulfoton | LESS THAN 0.02 |
| Ethion | LESS THAN 0.02 | Malathion | LESS THAN 0.02 |
| Methyl Parathion | LESS THAN 0.02 | Parathion | LESS THAN 0.02 |
| Thimet | LESS THAN 0.02 | Thiodan | LESS THAN 0.02 |
| Trithion | LESS THAN 0.02 | | |

| PESTICIDES AND PCB | PPM | | PPM |
|---|---|---|---|
| Aldrin | LESS THAN 0.02 | Alpha-BHC | LESS THAN 0.02 |
| Beta-BHC | LESS THAN 0.02 | Chlordane | LESS THAN 0.02 |
| DDE | LESS THAN 0.02 | DDT | LESS THAN 0.02 |
| Delta-BHC | LESS THAN 0.02 | Dieldrin | LESS THAN 0.02 |
| Endrin | LESS THAN 0.02 | HCB | LESS THAN 0.02 |
| Heptachlor | LESS THAN 0.02 | Heptachlor Epoxide | LESS THAN 0.02 |
| Lindane | LESS THAN 0.02 | Methoxychlor | LESS THAN 0.02 |
| Mirex | LESS THAN 0.02 | PCB | LESS THAN 0.15 |

| | | | |
|---|---|---|---|
| Aflatoxin | Aflatoxins | LESS THAN 5 PPB | |

For additional information, please contact:
(1) For assay methodology - Michael J. Murphy 314-982-2383
(2) For nutritional interpretation - Dr. Dorrance Haught 314-768-4362
(3) All other questions - LabDiet Business Office 314-768-4633

The term "Less Than" is used to signify the lower limit of quantitation of the procedure under the conditions employed. The use of the term "Less Than" does not imply that traces of analyte were present.

LabDiet is a registered trademark of PMI Nutrition International. All certified products are manufactured under strict supervisor in our ISO 9002 drug and estrogen free plant in Richmond, Indiana.

Ellis Anderson 11/22/99

http://www.labdiet.com/inter/owa/pwa_spc002 REVIEWED BY: DATE 9/1/99

Lancaster Laboratories
*Where quality is a science.*



**LLI Sample No. WW 3201550**
Collected: 07/28/99 at 09:00 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99

905 Sheehy Formulation Lab Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 0178 | Pesticides/PCB's in Water | | | See Page 2 |
| 1856 | Herbicides in Water | | | See Page 3 |
| 0224 | Chloride | < 2.0 | 2.0 | mg/l |
| 0228 | Sulfate | < 5.0 | 5.0 | mg/l |
| 0368 | Nitrate Nitrogen | < 0.50 | 0.50 | mg/l |
| 1504 | Fluoride | < 0.50 | 0.50 | mg/l |
| 1505 | Bromide | < 2.5 | 2.5 | mg/l |
| 1506 | Nitrite Nitrogen | < 0.50 | 0.50 | mg/l |
| 7322 | Ortho-phosphate | < 5.0 | 5.0 | mg/l |

Commonwealth of Pennsylvania Lab Certification No. 36-037

D. Lebo
9/7/99

1 COPY TO Primedica Argus ATTN: Mr. Ellis Anderson

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300
11:46:00 D 0001 2 676272
665 0.00 00067700 ASR000

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Lancaster Laboratories
*Where quality is a science.*



**LLI Sample No. WW 3201550**
Collected: 07/28/99 at 09:00 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99

905 Sheehy Formulation Lab Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| | Pesticides/PCB's in Water | | | |
| 1902 | Alpha BHC | < 0.0097 | 0.0097 | ug/l |
| 1903 | Beta BHC | < 0.0097 | 0.0097 | ug/l |
| 0453 | Gamma BHC - Lindane | < 0.0097 | 0.0097 | ug/l |
| 1904 | Delta BHC | < 0.0097 | 0.0097 | ug/l |
| 0454 | Heptachlor | < 0.0097 | 0.0097 | ug/l |
| 0455 | Aldrin | < 0.0097 | 0.0097 | ug/l |
| 1905 | Heptachlor Epoxide ① | 0.108 | 0.0097 | ug/l |
| 1906 | DDE | < 0.0097 | 0.0097 | ug/l |
| 1907 | DDD | < 0.0097 | 0.0097 | ug/l |
| 0478 | DDT | < 0.0097 | 0.0097 | ug/l |
| 0469 | Dieldrin | < 0.0097 | 0.0097 | ug/l |
| 0477 | Endrin | < 0.0097 | 0.0097 | ug/l |
| 1908 | Chlordane | < 0.29 | 0.29 | ug/l |
| 1909 | Toxaphene | < 3.9 | 3.9 | ug/l |
| 1910 | Endosulfan I | < 0.030 | 0.030 | ug/l |
| 1911 | Endosulfan II | < 0.0097 | 0.0097 | ug/l |
| 1912 | Endosulfan Sulfate | < 0.029 | 0.029 | ug/l |
| 0638 | Endrin Aldehyde | < 0.097 | 0.097 | ug/l |
| 1913 | PCB-1016 | < 1.0 | 1.0 | ug/l |
| 1914 | PCB-1221 | < 1.0 | 1.0 | ug/l |
| 1915 | PCB-1232 | < 1.0 | 1.0 | ug/l |
| 1916 | PCB-1242 | < 1.0 | 1.0 | ug/l |
| 1917 | PCB-1248 | < 1.0 | 1.0 | ug/l |
| 1918 | PCB-1254 | < 1.0 | 1.0 | ug/l |
| 1919 | PCB-1260 | < 1.0 | 1.0 | ug/l |

① EPA Maximum Contaminant level for drinking water is 0.4 ug/l. DAL 9/7/99

Dena Lebo
9/7/99

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

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Lancaster Laboratories
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LLI Sample No. WW 3201550
Collected: 07/28/99 at 09:00 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99

905 Sheehy Formulation Lab Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Herbicides in Water | | | | |
| 1857 | 2,4-D | < 0.48 | 0.48 | ug/l |
| 1858 | 2,4,5-TP | < 0.048 | 0.048 | ug/l |
| 5286 | 2,4,5-T | < 0.048 | 0.048 | ug/l |
| 5287 | Dalapon | < 1.2 | 1.2 | ug/l |
| 5288 | Dinoseb | < 0.24 | 0.24 | ug/l |
| 5289 | Dicamba | < 0.048 | 0.048 | ug/l |
| 5290 | MCPP | < 190. | 190. | ug/l |
| 5291 | MCPA | < 190. | 190. | ug/l |
| 5292 | 2,4-DP (Dichlorprop) | < 0.48 | 0.48 | ug/l |
| 5293 | 2,4-DB | < 0.48 | 0.48 | ug/l |
| 8103 | Pentachlorophenol | < 0.05 | 0.05 | ug/l |

D. Hebner
9/7/99

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

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2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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# Analysis Report

Lancaster Laboratories
*Where quality is a science.*



**LLI Sample No. WW 3315341**
Collected: 01/31/00 at 09:42 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#1 Formulation Lab 905 Sheehy Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 0178 | Pesticides/PCB's in Water | | | See Page 2 |
| 1856 | Herbicides in Water | | | See Page 3 |
| 0224 | Chloride | < 2.0 | 2.0 | mg/l |
| 0228 | Sulfate | < 5.0 | 5.0 | mg/l |
| 0368 | Nitrate Nitrogen | < 0.50 | 0.50 | mg/l |
| 1504 | Fluoride | < 0.50 | 0.50 | mg/l |
| 1505 | Bromide | < 2.5 | 2.5 | mg/l |
| 1506 | Nitrite Nitrogen | < 0.50 | 0.50 | mg/l |
| 7322 | Ortho-phosphate | < 5.0 | 5.0 | mg/l |

Commonwealth of Pennsylvania Lab Certification No. 36-037

D. Lebo
3/6/00

1 COPY TO Primedica Argus ATTN: Mr. Julian Gulbinski

Questions? Contact your Client Services Representative
at (717) 656-2300
02:35:09 D 0001 3 700965
047 0.00 00067700 ASR000

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

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Lancaster Laboratories
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# Analysis Report

Lancaster Laboratories
Where quality is a science.



LLI Sample No. WW 3315341
Collected: 01/31/00 at 09:42 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#1 Formulation Lab 905 Sheehy Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCB's in Water | | | | |
| 1902 | Alpha BHC | < 0.0095 | 0.0095 | ug/l |
| 1903 | Beta BHC | < 0.0095 | 0.0095 | ug/l |
| 0453 | Gamma BHC - Lindane | < 0.0095 | 0.0095 | ug/l |
| 1904 | Delta BHC | < 0.0095 | 0.0095 | ug/l |
| 0454 | Heptachlor | < 0.0095 | 0.0095 | ug/l |
| 0455 | Aldrin | < 0.0095 | 0.0095 | ug/l |
| 1905 | Heptachlor Epoxide | < 0.0095 | 0.0095 | ug/l |
| 1906 | DDE | < 0.0095 | 0.0095 | ug/l |
| 1907 | DDD | < 0.0095 | 0.0095 | ug/l |
| 0478 | DDT | < 0.0095 | 0.0095 | ug/l |
| 0469 | Dieldrin | < 0.0095 | 0.0095 | ug/l |
| 0477 | Endrin | < 0.0095 | 0.0095 | ug/l |
| 1908 | Chlordane | < 0.29 | 0.29 | ug/l |
| 1909 | Toxaphene | < 3.8 | 3.8 | ug/l |
| 1910 | Endosulfan I | < 0.0095 | 0.0095 | ug/l |
| 1911 | Endosulfan II | < 0.0095 | 0.0095 | ug/l |
| 1912 | Endosulfan Sulfate | < 0.029 | 0.029 | ug/l |
| 0638 | Endrin Aldehyde | < 0.095 | 0.095 | ug/l |
| 1913 | PCB-1016 | < 1.0 | 1.0 | ug/l |
| 1914 | PCB-1221 | < 1.0 | 1.0 | ug/l |
| 1915 | PCB-1232 | < 1.0 | 1.0 | ug/l |
| 1916 | PCB-1242 | < 1.0 | 1.0 | ug/l |
| 1917 | PCB-1248 | < 1.0 | 1.0 | ug/l |
| 1918 | PCB-1254 | < 1.0 | 1.0 | ug/l |
| 1919 | PCB-1260 | < 1.0 | 1.0 | ug/l |

D. Lebo
3/6/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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# Analysis Report

Lancaster Laboratories
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**LLI Sample No. WW 3315341**
Collected: 01/31/00 at 09:42 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#1 Formulation Lab 905 Sheehy Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Herbicides in Water | | | | |
| 1857 | 2,4-D | < 0.48 | 0.48 | ug/l |
| 1858 | 2,4,5-TP | < 0.048 | 0.048 | ug/l |
| 5286 | 2,4,5-T | < 0.048 | 0.048 | ug/l |
| 5287 | Dalapon | < 1.2 | 1.2 | ug/l |
| 5288 | Dinoseb | < 0.24 | 0.24 | ug/l |
| 5289 | Dicamba | < 0.29 | 0.29 | ug/l |
| 5290 | MCPP | < 190. | 190. | ug/l |
| 5291 | MCPA | < 190. | 190. | ug/l |
| 5292 | 2,4-DP (Dichlorprop) | < 0.48 | 0.48 | ug/l |
| 5293 | 2,4-DB | < 0.48 | 0.48 | ug/l |
| 8103 | Pentachlorophenol | < 0.05 | 0.05 | ug/l |

D. Lebo
3/6/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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# Analysis Report

Lancaster Laboratories
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**LLI Sample No. WW 3315342**
Collected: 01/31/00 at 09:40 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#2 Formulation Lab 905 Sheehy Bldg. F Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 0178 | Pesticides/PCB's in Water | | | See Page 2 |
| 1B56 | Herbicides in Water | | | See Page 3 |
| 0224 | Chloride | < 2.0 | 2.0 | mg/l |
| 0228 | Sulfate | < 5.0 | 5.0 | mg/l |
| 0368 | Nitrate Nitrogen | < 0.50 | 0.50 | mg/l |
| 1504 | Fluoride | < 0.50 | 0.50 | mg/l |
| 1505 | Bromide | < 2.5 | 2.5 | mg/l |
| 1506 | Nitrite Nitrogen | < 0.50 | 0.50 | mg/l |
| 7322 | Ortho-phosphate | < 5.0 | 5.0 | mg/l |

Commonwealth of Pennsylvania Lab Certification No. 36-037

D. Lebo
3/6/00

1 COPY TO Primedica Argus ATTN: Mr. Julian Gulbinski

Questions? Contact your Client Services Representative
at (717) 656-2300
02:35:24 D 0001 3 700965
047 0.00 00067700 ASR000

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

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# Analysis Report

Lancaster Laboratories
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**LLI Sample No. WW 3315342**
Collected: 01/31/00 at 09:40 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#2 Formulation Lab 905 Sheehy Bldg. F Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCB's in Water | | | | |
| 1902 | Alpha BHC | < 0.0095 | 0.0095 | ug/l |
| 1903 | Beta BHC | < 0.0095 | 0.0095 | ug/l |
| 0453 | Gamma BHC - Lindane | < 0.0095 | 0.0095 | ug/l |
| 1904 | Delta BHC | < 0.0095 | 0.0095 | ug/l |
| 0454 | Heptachlor | < 0.0095 | 0.0095 | ug/l |
| 0455 | Aldrin | < 0.0095 | 0.0095 | ug/l |
| 1905 | Heptachlor Epoxide | < 0.0095 | 0.0095 | ug/l |
| 1906 | DDE | < 0.0095 | 0.0095 | ug/l |
| 1907 | DDD | < 0.0095 | 0.0095 | ug/l |
| 0478 | DDT | < 0.0095 | 0.0095 | ug/l |
| 0469 | Dieldrin | < 0.0095 | 0.0095 | ug/l |
| 0477 | Endrin | < 0.0095 | 0.0095 | ug/l |
| 1908 | Chlordane | < 0.29 | 0.29 | ug/l |
| 1909 | Toxaphene | < 3.8 | 3.8 | ug/l |
| 1910 | Endosulfan I | < 0.0095 | 0.0095 | ug/l |
| 1911 | Endosulfan II | < 0.0095 | 0.0095 | ug/l |
| 1912 | Endosulfan Sulfate | < 0.029 | 0.029 | ug/l |
| 0638 | Endrin Aldehyde | < 0.095 | 0.095 | ug/l |
| 1913 | PCB-1016 | < 1.0 | 1.0 | ug/l |
| 1914 | PCB-1221 | < 1.0 | 1.0 | ug/l |
| 1915 | PCB-1232 | < 1.0 | 1.0 | ug/l |
| 1916 | PCB-1242 | < 1.0 | 1.0 | ug/l |
| 1917 | PCB-1248 | < 1.0 | 1.0 | ug/l |
| 1918 | PCB-1254 | < 1.0 | 1.0 | ug/l |
| 1919 | PCB-1260 | < 1.0 | 1.0 | ug/l |

D. Hess
3/6/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
*Where quality is a science.*



LLI Sample No. WW 3315342
Collected: 01/31/00 at 09:40 by PA

Submitted: 01/31/00 Reported: 02/15/00
Discard: 03/17/00

#2 Formulation Lab 905 Sheehy Bldg. F Grab Water Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1134962
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Herbicides in Water | | | | |
| 1857 | 2,4-D | < 0.48 | 0.48 | ug/l |
| 1858 | 2,4,5-TP | < 0.048 | 0.048 | ug/l |
| 5286 | 2,4,5-T | < 0.048 | 0.048 | ug/l |
| 5287 | Dalapon | < 1.2 | 1.2 | ug/l |
| 5288 | Dinoseb | < 0.24 | 0.24 | ug/l |
| 5289 | Dicamba | < 0.29 | 0.29 | ug/l |
| 5290 | MCPP | < 190. | 190. | ug/l |
| 5291 | MCPA | < 190. | 190. | ug/l |
| 5292 | 2,4-DP (Dichlorprop) | < 0.48 | 0.48 | ug/l |
| 5293 | 2,4-DB | < 0.48 | 0.48 | ug/l |
| 8103 | Pentachlorophenol | < 0.05 | 0.05 | ug/l |

D. Hess
3/6/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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See reverse side for explanation of symbols and abbreviations.

ANALYTICAL LABORATORIES, INC.
P.O. Box 319
Chalfont, PA 18914
(215) 723-6466

SAMPLE ANALYSIS REPORT ①

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **6529-99A**
Date Sampled : **12/30/99**
Time Sampled : **1415**
Date Received : **12/30/99**
Sampled By : **RW**

Sample source: **Chem. Lab**
905 B Sheehy Drive ④ DL 1/21/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | < 1 |
| Fecal coliform bacteria, counts/100 ml | | < 1 |
| Total Chlorine, mg/l as Cl | | < 0.1 |

D. Lebo 1/21/00

① Original report received at Argus on 1/21/00; inadvertantly not signed prior to receipt at Argus. D. Lebo 1/21/00.

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

①
Maryann E. Fedock / President

PA DEP #09-332
NJ Cert #77847

ANALYTICAL LABORATORIES, INC.
P.O. Box 319
Chalfont, PA 18914
(215) 723-6466

SAMPLE ANALYSIS REPORT ①

Customer: Argus Research Inc.
905 Sheehy Dr., Building A
Horsham, PA 19044
Attn. Dena Lebo
Attn: 215-443-8710
FAX : 215-443-8587

Sample Number : 6529-99B
Date Sampled : 12/30/99
Time Sampled : 1415
Date Received : 12/30/99
Sampled By : RW

Sample source: Rm. 13

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | < 1 |
| Fecal coliform bacteria, counts/100 ml | | < 1 |
| Total Chlorine, mg/l as Cl | | < 0.1 ② |

D. Lebo 1/21/00

① Original report received at Argus on 1/21/00; inadvertantly not signed prior to receipt at Argus D. Lebo 1/21/00

② On Weekly Chlorine check (12/29/99), rm 13 recorded as 0.4 PPM. DL 1/21/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

①

Maryann E.Fedock / President

PA DEP #09-332
NJ Cert #77847

ANALYTICAL LABORATORIES, INC.
P.O. Box 319
Chalfont, PA 18914
(215) 723-6466

SAMPLE ANALYSIS REPORT ①

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **6529-99D**
Date Sampled : **12/30/99**
Time Sampled : **1415**
Date Received : **12/30/99**
Sampled By : **RW**

Sample source: **Chem. Lab II**
905 F Sheehy Drive ① DL 1/21/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | **< 1** |
| Fecal coliform bacteria, counts/100 ml | | **< 1** |
| Total Chlorine, mg/l as Cl | | **< 0.1** |

D. Lebo 1/21/00

① Original received at Argus on 1/21/00; inadvertantly not signed prior to receipt at Argus. D. Lebo 1/21/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

①
Maryann E.Fedock / President

PA DEP #09-332
NJ Cert #77847

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2182-00A**
Date Sampled : **01/24/00**
Time Sampled : **1215**
Date Received : **01/24/00**
Sampled By : **RW**

Sample source: **Chem. Lab**
905 B Sheehy Drive D.L. 1/31/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | < 1 |
| Noncoliform bacteria, counts/100 ml | | < 1 |
| Total Chlorine, mg/l as Cl | | < 0.1 |

D. Lebo
1/31/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

PA DEP #09-332
NJ Cert #77847

Maryann E. Fedock
Maryann E.Fedock / President

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2182-00C**
Date Sampled : **01/24/00**
Time Sampled : **1215**
Date Received : **01/24/00**
Sampled By : **RW**

Sample source: **Chem. Lab II**
905 F Sheehy Drive D.L. 1/31/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | **< 1** |
| Noncoliform bacteria, counts/100 ml | | **< 1** |
| Total Chlorine, mg/l as Cl | | **< 0.1** |

D. Lebo
1/31/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

PA DEP #09-332
NJ Cert #77847

Maryann E. Fedock
Maryann E.Fedock / President

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2182-00D**
Date Sampled : **01/24/00**
Time Sampled : **1215**
Date Received : **01/24/00**
Sampled By : **RW**

Sample source: **Necropsy**
905 Sheehy Drive D DL 1/31/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | **< 1** |
| Noncoliform bacteria, counts/100 ml | | **< 1** |
| Total Chlorine, mg/l as Cl | | **< 0.1** |

D. Lebo
1/31/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

Maryann E. Fedock
Maryann E.Fedock / President

PA DEP #09-332
NJ Cert #77847

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2335-00A**
Date Sampled : **02/16/00**
Time Sampled : **0930**
Date Received : **02/16/00**
Sampled By : **RW**

Sample source: **Chem. Lab**
905 B Sheehy Drive DL 2/22/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| T al Coliform Bacteria, counts/100 ml | < 1 | **< 1** |
| l coliform bacteria, counts/100 ml | | **< 1** |
| Total Chlorine, mg/l as Cl | | **< 0.1** |

D. Lebo
2/22/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

Maryann E. Fedock
Maryann E.Fedock / President

PA DEP #09-332
N.J Cert #77847

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2335-00B**
Date Sampled : **02/16/00**
Time Sampled : **0930**
Date Received : **02/16/00**
Sampled By : **RW**

Sample source: **Rm. 35**
905 Sheehy Drive D.L. 2/22/00

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| Total Coliform Bacteria, counts/100 ml | < 1 | **< 1** |
| Fecal coliform bacteria, counts/100 ml | | **< 1** |
| Total Chlorine, mg/l as Cl | | **< 0.1** |

D. Lebo
2/22/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

PA DEP #09-332
NJ Cert #77847

Maryann E. Fedock
Maryann E.Fedock / President

**ANALYTICAL LABORATORIES, INC.**
**P.O. Box 319**
**Chalfont, PA 18914**
**(215) 723-6466**

SAMPLE ANALYSIS REPORT

Customer: **Argus Research Inc.**
**905 Sheehy Dr., Building A**
**Horsham, PA 19044**
**Attn. Dena Lebo**
Attn: **215-443-8710**
FAX : **215-443-8587**

Sample Number : **2335-00D**
Date Sampled : **02/16/00**
Time Sampled : **0930**
Date Received : **02/16/00**
Sampled By : **RW**

Sample source: **Chem. Lab #2** (D) DL 2/22/00
905 F Sheehy Drive

ANALYTICAL RESULTS

Water Safety Classification: **No Coliform bacteria were detected. Therefore, the water supply, at the time of sampling, meets the EPA and DEP drinking water standards for this parameter.**

| Parameter | MCL | Result |
|---|---|---|
| T al Coliform Bacteria, counts/100 ml | < 1 | < 1 |
| coliform bacteria, counts/100 ml | | < 1 |
| Total Chlorine, mg/l as Cl | | < 0.1 |

D. Lebo
2/22/00

Results which are outside the "Maximum Contaminant Level" (MCL) established under the "Safe Drinking Water Act" are marked with asterisks (**).

Symbol key:
TNTC - Too numerous to count (> 200)
< - Less than
mg/l - milligrams/liter

PA DEP #09-332
NJ Cert #77847

Maryann E. Fedock / President

# Analysis Repo

Lancaster Laboratories
*Where quality is a science.*



LLI Sample No. G5 3201551
Collected: 07/28/99 at 09:10 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99 ©12/1/99 EA
Lot # Apr 02 99
905 Sheehy Bedding Grab Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive. Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 1646 | Barium | < 10. | 10. | mg/kg |
| 1649 | Cadmium | < 2.0 | 2.0 | mg/kg |
| 1651 | Chromium | < 4.0 | 4.0 | mg/kg |
| 1655 | Lead | < 10. | 10. | mg/kg |
| 1666 | Silver | < 2.0 | 2.0 | mg/kg |
| 6935 | Arsenic TR | < 1.0 | 1.0 | mg/kg |
| 6936 | Selenium TR | < 1.0 | 1.0 | mg/kg |
| 0159 | Mercury | < 0.099 | 0.099 | mg/kg |
| 1224 | Pesticides/PCBs in Solids | | | See Page 2 |
| 1863 | Appendix IX Herbicides in Soil | | | See Page 3 |

D. Lebo
9/7/99

1 COPY TO Primedica Argus ATTN: Mr. Ellis Anderson

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300
11:48:29 D 0001 2 676272
665 25.00 00067600 ASR000

Respectfully Submitted
Jenifer E. Hess. B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax 717-656-2681

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See reverse side for explanation of symbols and abbreviations.

2216 Rev. 3/23/99

# Analysis Repor

Lancaster Laboratories
*Where quality is a science.*



**LLI Sample No. G5 3201551**
Collected: 07/28/99 at 09:10 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99 ① 12/14/99 BA
Lot # Apr 02 99
905 Sheehy Bedding Grab Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCBs in Solids | | | | |
| 1981 | Alpha BHC | < 0.33 | 0.33 | ug/kg |
| 1982 | Beta BHC ① | 0.34 | 0.33 | ug/kg |
| 1218 | Gamma BHC - Lindane | < 0.33 | 0.33 | ug/kg |
| 1983 | Delta BHC | < 0.33 | 0.33 | ug/kg |
| 1219 | Heptachlor | < 0.33 | 0.33 | ug/kg |
| 1220 | Aldrin | < 0.33 | 0.33 | ug/kg |
| 1984 | Heptachlor Epoxide | < 0.33 | 0.33 | ug/kg |
| 1985 | DDE | < 0.67 | 0.67 | ug/kg |
| 1986 | DDD | < 0.67 | 0.67 | ug/kg |
| 1221 | DDT | < 0.67 | 0.67 | ug/kg |
| 1222 | Dieldrin | < 0.67 | 0.67 | ug/kg |
| 1223 | Endrin | < 0.67 | 0.67 | ug/kg |
| 1959 | Methoxychlor | < 3.3 | 3.3 | ug/kg |
| 37 | Chlordane | < 17. | 17. | ug/kg |
| 1988 | Toxaphene | < 33. | 33. | ug/kg |
| 1989 | Endosulfan I | < 0.33 | 0.33 | ug/kg |
| 1990 | Endosulfan II | < 0.67 | 0.67 | ug/kg |
| 1991 | Endosulfan Sulfate | < 0.67 | 0.67 | ug/kg |
| 1992 | Endrin Aldehyde ① | 0.69 | 0.67 | ug/kg |
| 1993 | PCB-1016 | < 17. | 17. | ug/kg |
| 1994 | PCB-1221 | < 17. | 17. | ug/kg |
| 1995 | PCB-1232 | < 17. | 17. | ug/kg |
| 1996 | PCB-1242 | < 17. | 17. | ug/kg |
| 1997 | PCB-1248 | < 17. | 17. | ug/kg |
| 1998 | PCB-1254 | < 17. | 17. | ug/kg |
| 1999 | PCB-1260 | < 17. | 17. | ug/kg |

① Value within SOP 34B3.2 limits; no action required. DL 9/7/99

D. Lebo
9/7/99

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax. 717-656-2681

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2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
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LLI Sample No. G5 3201551
Collected: 07/28/99 at 09:10 by EA

Submitted: 07/28/99 Reported: 08/26/99
Discard: 09/26/99 (E) 12/14/99 EA
not # Apr 02 99
905 Sheehy Bedding Grab Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O. 1128707
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Appendix IX Herbicides in Soil | | | | |
| 4174 | 2,4-D | < 17. | 17. | ug/kg |
| 4176 | 2,4,5-TP (Silvex) | < 1.7 | 1.7 | ug/kg |

The surrogate data in the original extract is outside the QC limits.
Results from the reextraction are also outside the QC limits, indicating possible matrix interference.

D. Hess
9/7/99

Questions? Contact your Client Services Representative
Lynn M. Hebner at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
Where quality is a science.



**LLI Sample No. G5 3350996**
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 1646 | Barium | < 9.8 | 9.8 | mg/kg |
| 1649 | Cadmium | < 2.0 | 2.0 | mg/kg |
| 1651 | Chromium | < 3.9 | 3.9 | mg/kg |
| 1655 | Lead | < 9.8 | 9.8 | mg/kg |
| 1666 | Silver | < 2.0 | 2.0 | mg/kg |
| 6935 | Arsenic TR | < 1.0 | 1.0 | mg/kg |
| 6936 | Selenium TR | < 1.0 | 1.0 | mg/kg |
| 0159 | Mercury | < 0.096 | 0.096 | mg/kg |
| 1224 | Pesticides/PCBs in Solids | | | See Page 2 |
| 1863 | Appendix IX Herbicides in Soil | | | See Page 3 |

Commonwealth of Pennsylvania Lab Certification No. 36-037

Dean Lebo
4/17/00

1 COPY TO Primedica Argus ATTN: Alan M. Hoberman, Ph D

Questions? Contact your Client Services Representative
at (717) 656-2300

10:45:39 D 0001 1 708507
047 25.00 00067600 ASR000

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
Where quality is a science.



**LLI Sample No. G5 3350996**
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive. Ste. A
Horsham PA 19044-1297

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCBs in Solids | | | | |
| 1981 | Alpha BHC | < 0.33 | 0.33 | ug/kg |
| 1982 | Beta BHC | < 0.33 | 0.33 | ug/kg |
| 1218 | Gamma BHC - Lindane | < 0.33 | 0.33 | ug/kg |
| 1983 | Delta BHC | < 0.33 | 0.33 | ug/kg |
| 1219 | Heptachlor | < 0.33 | 0.33 | ug/kg |
| 1220 | Aldrin | < 0.33 | 0.33 | ug/kg |
| 1984 | Heptachlor Epoxide | < 0.33 | 0.33 | ug/kg |
| 1985 | DDE | < 0.67 | 0.67 | ug/kg |
| 1986 | DDD | < 0.67 | 0.67 | ug/kg |
| 1221 | DDT | < 0.67 | 0.67 | ug/kg |
| 1222 | Dieldrin | < 0.67 | 0.67 | ug/kg |
| 1223 | Endrin | < 0.67 | 0.67 | ug/kg |
| 1859 | Methoxychlor | < 3.3 | 3.3 | ug/kg |
| 1987 | Chlordane | < 17. | 17. | ug/kg |
| 1988 | Toxaphene | < 33. | 33. | ug/kg |
| 1989 | Endosulfan I | < 0.33 | 0.33 | ug/kg |
| 1990 | Endosulfan II | < 0.67 | 0.67 | ug/kg |
| 1991 | Endosulfan Sulfate | < 0.67 | 0.67 | ug/kg |
| 1992 | Endrin Aldehyde ① | 0.73 | 0.67 | ug/kg |
| 1993 | PCB-1016 | < 17. | 17. | ug/kg |
| 1994 | PCB-1221 | < 17. | 17. | ug/kg |
| 1995 | PCB-1232 | < 17. | 17. | ug/kg |
| 1996 | PCB-1242 | < 17. | 17. | ug/kg |
| 1997 | PCB-1248 | < 17. | 17. | ug/kg |
| 1998 | PCB-1254 | < 17. | 17. | ug/kg |
| 1999 | PCB-1260 | < 17. | 17. | ug/kg |

D. Lebo
4/17/00

① The U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Endrin in water for human consumption is 2.0 ug/L. The level reported here in the bedding is not expected to interfere with results of a study.
D. Lebo 4/17/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax 717-656-2681

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# Analysis Report

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**LLI Sample No. G5 3350996**
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive. Ste. A
Horsham PA 19044-1297

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Appendix IX Herbicides in Soil | | | | |
| 4174 | 2.4-D | < 17. | 17. | ug/kg |
| 4176 | 2.4.5-TP (Silvex) | < 1.7 | 1.7 | ug/kg |

D. Lebo
4/17/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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# Analysis Report

Lancaster Laboratories
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**LLI Sample No. G5 3350996**
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O.
Rel.

EXACT COPY
JB 5-22-00

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 1646 | Barium | < 9.8 | 9.8 | mg/kg |
| 1649 | Cadmium | < 2.0 | 2.0 | mg/kg |
| 1651 | Chromium | < 3.9 | 3.9 | mg/kg |
| 1655 | Lead | < 9.8 | 9.8 | mg/kg |
| 1666 | Silver | < 2.0 | 2.0 | mg/kg |
| 6935 | Arsenic TR | < 1.0 | 1.0 | mg/kg |
| 6936 | Selenium TR | < 1.0 | 1.0 | mg/kg |
| 0159 | Mercury | < 0.096 | 0.096 | mg/kg |
| 1224 | Pesticides/PCBs in Solids | | | See Page 2 |
| 1863 | Appendix IX Herbicides in Soil | | | See Page 3 |

Commonwealth of Pennsylvania Lab Certification No. 36-037

Dina Lebo
4/17/00

1 COPY TO Primedica Argus ATTN: Alan M. Hoberman, Ph D

Questions? Contact your Client Services Representative
at (717) 656-2300

10:45:39 D 0001 1 708507
047 25.00 00067600 ASR000

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717 656 2300 Fax: 717 656 2681

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2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
Where quality is a science.

EXACT COPY
JB 5/22/00



LLI Sample No. G5 3350996
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCBs in Solids | | | | |
| 1981 | Alpha BHC | < 0.33 | 0.33 | ug/kg |
| 1982 | Beta BHC | < 0.33 | 0.33 | ug/kg |
| 1218 | Gamma BHC - Lindane | < 0.33 | 0.33 | ug/kg |
| 1983 | Delta BHC | < 0.33 | 0.33 | ug/kg |
| 1219 | Heptachlor | < 0.33 | 0.33 | ug/kg |
| 1220 | Aldrin | < 0.33 | 0.33 | ug/kg |
| 1984 | Heptachlor Epoxide | < 0.33 | 0.33 | ug/kg |
| 1985 | DDE | < 0.67 | 0.67 | ug/kg |
| 1986 | DDD | < 0.67 | 0.67 | ug/kg |
| 1221 | DDT | < 0.67 | 0.67 | ug/kg |
| 1222 | Dieldrin | < 0.67 | 0.67 | ug/kg |
| 1223 | Endrin | < 0.67 | 0.67 | ug/kg |
| 1859 | Methoxychlor | < 3.3 | 3.3 | ug/kg |
| 1987 | Chlordane | < 17. | 17. | ug/kg |
| 1988 | Toxaphene | < 33. | 33. | ug/kg |
| 1989 | Endosulfan I | < 0.33 | 0.33 | ug/kg |
| 1990 | Endosulfan II | < 0.67 | 0.67 | ug/kg |
| 1991 | Endosulfan Sulfate | < 0.67 | 0.67 | ug/kg |
| 1992 | Endrin Aldehyde ① | 0.73 | 0.67 | ug/kg |
| 1993 | PCB-1016 | < 17. | 17. | ug/kg |
| 1994 | PCB-1221 | < 17. | 17. | ug/kg |
| 1995 | PCB-1232 | < 17. | 17. | ug/kg |
| 1996 | PCB-1242 | < 17. | 17. | ug/kg |
| 1997 | PCB-1248 | < 17. | 17. | ug/kg |
| 1998 | PCB-1254 | < 17. | 17. | ug/kg |
| 1999 | PCB-1260 | < 17. | 17. | ug/kg |

D. Lebo
4/17/00

① The U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Endrin in water for human consumption is 2.0 ug/L. The level reported here in the bedding is not expected to interfere with results of a study.
D. Lebo 4/17/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories is a subsidiary of Thermo TerraTech Inc., a Thermo Electron Company.
See reverse side for explanation of symbols and abbreviations.
2216 Rev. 3/23/99

# Analysis Report

Lancaster Laboratories
Where quality is a science.

EXACT COPY
JB 5.22.00



LLI Sample No. G5 3350996
Collected:

Submitted: 03/29/00 Reported: 04/10/00
Discard: 04/21/00

Bedding (Bed-O-Cob) Sample

Account No: 02423

Primedica Argus
905 Sheehy Drive, Ste. A
Horsham PA 19044-1297

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Appendix IX Herbicides in Soil | | | | |
| 4174 | 2,4-D | < 17. | 17. | ug/kg |
| 4176 | 2,4,5-TP (Silvex) | < 1.7 | 1.7 | ug/kg |

D. Libo
4/17/00

Questions? Contact your Client Services Representative
at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605 2425
717-656-2300 Fax 717-656-2681

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See reverse side for explanation of symbols and abbreviations
2216 Rev. 3/23/99

## Explanation of Symbols and Abbreviations

*The following defines common symbols and abbreviations used in reporting technical data:*

| | | | |
|---|---|---|---|
| **N.D.** | none detected | **BMQL** | Below Minimum Quantitation Level |
| **TNTC** | Too Numerous To Count | **MPN** | Most Probable Number |
| **IU** | International Units | **CP Units** | cobalt-chloroplatinate units |
| **umhos/cm** | micromhos/cm | **NTU** | nephelometric turbidity units |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **Cal** | (diet) calories | **lb.** | pound(s) |
| **meq** | milliequivalents | **kg** | kilogram(s) |
| **g** | gram(s) | **mg** | milligram(s) |
| **ug** | microgram(s) | **l** | liter(s) |
| **ml** | milliliter(s) | **ul** | microliter(s) |
| **m3** | cubic meter(s) | **fib >5 um/ml** | fibers greater than 5 microns in length per ml |

**<** less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

**>** greater than

**ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

*U.S. EPA data qualifiers:*

**Organic Qualifiers**

| | |
|---|---|
| **A** | TIC is a possible aldol-condensation product |
| **B** | Analyte was also detected in the blank |
| **C** | Pesticide result confirmed by GC/MS |
| **D** | Compound quantitated on a diluted sample |
| **E** | Concentration exceeds the calibration range of the instrument |
| **J** | Estimated value |
| **N** | Presumptive evidence of a compound (TICs only) |
| **P** | Concentration difference between primary confirmation columns >25% |
| **U** | Compound was not detected |
| **X,Y,Z** | Defined in case narrative |

**Inorganic Qualifiers**

| | |
|---|---|
| **B** | Value is <CRDL, but ≥IDL |
| **E** | Estimated due to interference |
| **M** | Duplicate injection precision not met |
| **N** | Spike sample not within control limits |
| **S** | Method of standard additions (MSA) used for calculation |
| **U** | Compound was not detected |
| **W** | Post digestion spike out of control limits |
| ***** | Duplicate analysis not within control limits |
| **+** | Correlation coefficient for MSA <0.995 |

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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# APPENDIX I

# ANALYTICAL REPORT

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK
# PROTOCOL 1416-003

## CONCENTRATION ANALYSES REPORT

SUBMITTED TO:
Raymond G. York, Ph.D., D.A.B.T.
Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, Pennsylvania 19044

SUBMITTED BY:
**Latha Narayanan**

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AFRL/HEST, Bldg 79
2856 G Street
Wright-Patterson AFB, OH 45433-7400

# CONCENTRATION ANALYSES REPORT

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## Introduction

Ammonium perchlorate is an oxidizer that has been used as a component of solid rocket fuel (EPA, 1998). Perchlorate, the dissociated ion of ammonium perchlorate, has recently been recognized as a persistent and pervasive contaminant of water supplies in a number of major metropolitan areas (personal communication, D. Rogers). Ammonium perchlorate is a white, crystalline salt that readily dissociates in water. It was previously shown to be stable in reagent water at room temperature for at least 109 days (Tsui, Mattie and Narayanan, 1998).

## Methods

**Compliance Statement:** The analyses in this report entitled "Concentration Analyses Report" were conducted in the spirit of the Environmental Protection Agency's Good Laboratory Practices Standards, 40 CFR 792.

**Sample Collection:** Ammonium perchlorate formulations were prepared by Argus Research Lab, Inc. Triplicate samples (2 mL each) were taken from each of the prepared formulations (including stock and carrier) on the first and last days of preparation. Two samples were shipped to AFRL/HEST by overnight delivery and the remaining samples were retained at the testing laboratory as backup samples. Samples were kept refrigerated at 4° C prior to analysis for perchlorate ion. The target doses of ammonium perchlorate were 0 (Carrier), 0.01, 0.1, 1.0, or 30.0 mg/kg-day.

**Perchlorate Ion Analysis:** Test materials, reagents, calibration standards and analytical methods were performed according to the procedure of Tsui, Mattie and Narayanan (1998).

**Statistical Analysis:** Linearity of the standard curve was verified by testing for correlation using the subroutine in Microsoft ~~Excell~~. (E)
Excel
RGY 27-FEB-01

## Results

Table 1 shows the perchlorate ion analysis for samples taken on the first day of solution preparation. Figure 1 shows the standard curve used to determine the perchlorate ion values. Table 2 shows the perchlorate ion analysis for samples taken on the last day of solution preparation. Figure 2 shows the standard curve used to determine the perchlorate ion values for the last day of formulation preparation. Values for all samples tested show good agreement between the target dose and the actual perchlorate ion value. All measured values were within 5% (usually less) of the target values.

## References

EPA. (1998). Perchlorate environmental contamination: toxicological review and risk characterization based on emerging information. External review draft, December 31, 1998. National Center for Environmental Assessment, Washington, D.C. NCEA-1-0503.

Rogers, Daniel Lt Col. (2000). Personal communication. 314TH AW/JA, Little Rock AFB, Arkansas.

Tsui, D.T., Mattie, D.R., and Narayanan, L. (1998) Stability and concentration verification of ammonium perchlorate dosing solutions. United States Air Force, Armstrong Laboratory, AFRL-HE-WP-TR-1998-006.

Latha Narayanan Nov 15, 00
Latha Narayanan Date

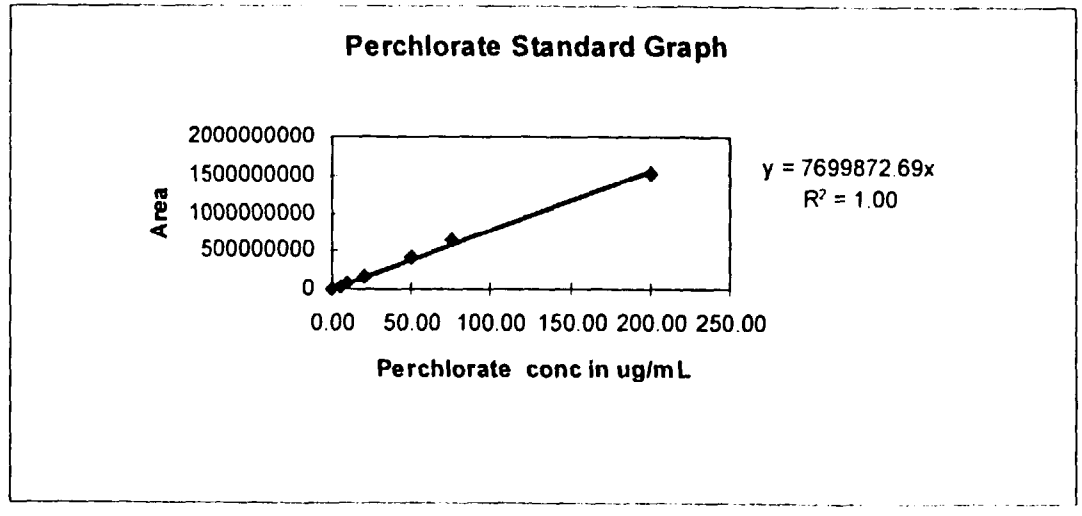
David R. Mattie 11/15/00
David R. Mattie Date

## Table 1. Perchlorate Ion Analysis for Samples Taken on the First Day of Preparation

| Batch # | Perchlorate Ion Analysis<br>Dose Samples | Area1<br>Generated<br>on 12/29/99 | Area2<br>Generated<br>on 12/29/99 | Mean Area-BKG<br>Generated<br>on 12/29/99 | Perchlorate<br>conc in<br>mcg/mL | Dilution<br>Factor | Perchlorate<br>conc in<br>mcg/mL | Perchlorate<br>conc in<br>mg/mL |
|---|---|---|---|---|---|---|---|---|
| | From Argus Lab | | | | | | | |
| 1416-003 | A - 0 mcg/mL | 0 | 0 | 0 | 0 | 1 | 0 | 0.0000 |
| 1416-003 | B - 0.0658 mcg/mL | 506012 | 512618 | 509315 | 0.066145899 | 1 | 0.066145899 | 0.0001 |
| 1416-003 | C - 0.658 mcg/mL | 5060686 | 5051405 | 5056045.5 | 0.656640142 | 1 | 0.656640142 | 0.0007 |
| 1416-003 | D - 6.58 mcg/mL | 51856141 | 50091175 | 50973658 | 6.620065039 | 1 | 6.620065039 | 0.0066 |
| 1416-003 | E - 197.27 mcg/mL | 739020304 | 782754399 | 760887351.5 | 98.81817299 | 2 | 197.636346 | 0.1976 |
| 1416-003 | F - 10 mg/mL | 494488515 | 494125706 | 494307110.5 | 64.19679005 | 156 | 10014.69925 | 10.0147 |
| | HClO4 20ug/mL-Control | 156566786 | 156566786 | 156566786 | 20.33368502 | | | |
| | A- 0.00 mcg/mL | 0 | 0 | 0 | 0.000 | | | |
| | Control+Spike 20.00 mcg/mL | 156574444 | 156574444 | 156574444 | 20.33467959 | | | |

**Figure 1. Standard Curve for Perchlorate Ion Analysis for Samples Taken on the First Day of Preparation**

| Perchlorate Ion Conc in ug/mL | Mean Area-BKG Generated on 12/29/99 |
|---|---|
| 0.00 | 0 |
| 5.00 | 38953630 |
| 10.00 | 73702666 |
| 20.0 | 156566786 |
| 50.0 | 417379406 |
| 75.0 | 640215223 |
| 200 | 1508252819 |

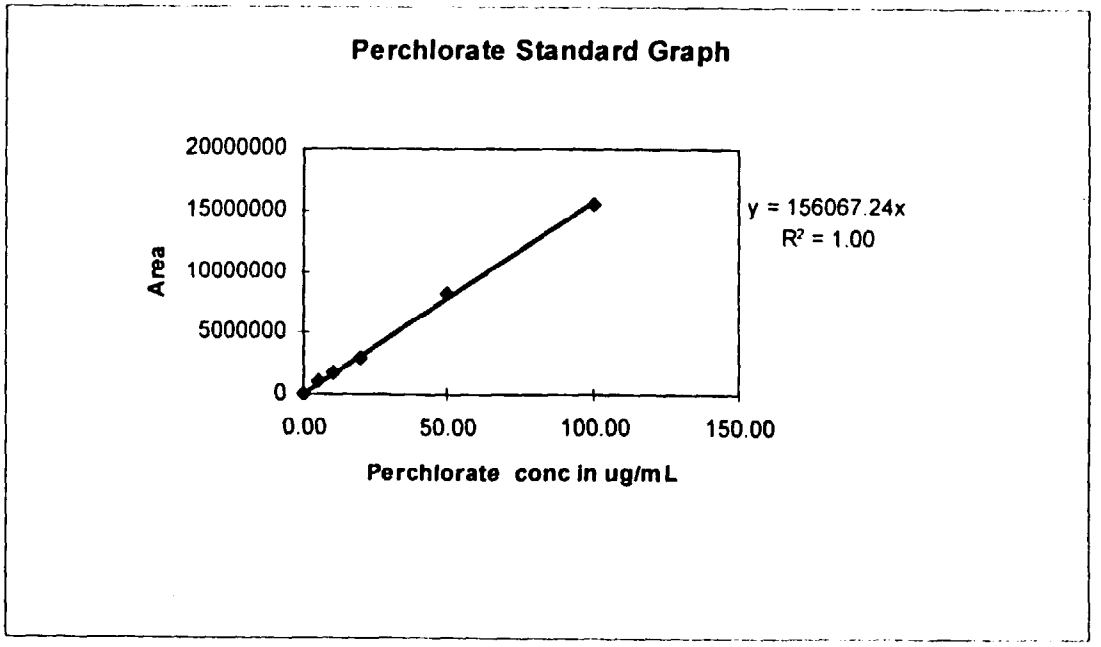


## Table 2. Perchlorate Ion Analysis for Samples Taken on the Last Day of Preparation

| Batch # | Perchlorate Ion Analysis<br>Dose Samples | Area1<br>Generated on 03/08/00 | Area2<br>Generated on 03/08/00 | Mean Area-BKG<br>Generated on 03/08/00 | Perchlorate conc in ng/mL | Dilution Factor | Perchlorate conc in ng/mL | Perchlorate conc in mcg/mL | Perchlorate conc in mg/mL |
|---|---|---|---|---|---|---|---|---|---|
| | From Argus Lab | | | | | | | | |
| 1416-003 | A - 0 mcg/mL | 0 | 0 | 0 | 0.00 | 1 | 0 | 0.0000 | 0.0000 |
| 1416-003 | B - 0.0665 mcg/mL | 10473272 | 10456260 | 10464766 | 67.05 | 1 | 67.0529318 | 0.0671 | 0.0001 |
| 1416-003 | C - 0.623 mcg/mL | 965968 | 984906 | 975437 | 6.25 | 100 | 625.0107326 | 0.6250 | 0.0006 |
| 1416-003 | D -6.78 mcg/mL | 1025644 | 1136324 | 1080984 | 6.93 | 1000 | 6926.39916 | 6.9264 | 0.0069 |
| 1416-003 | E - 218.50 mcg/mL | 11604072 | 11315516 | 11459794 | 73.43 | 2975 | 218449.9909 | 218.4500 | 0.2184 |
| 1416-003 | F - 10 mg/mL | 1033446 | 1047444 | 1040445 | 6.67 | 1500000 | 9999968.603 | 9999.9686 | 10.0000 |
| | HCLO4 10 mcg/mL-Standard | 1556940 | 1556940 | 1556940 | 9.98 | | | | |
| | A- 0.00 mcg/mL | 0 | 0 | 0 | 0.000 | | | | |
| | Control+Spike 10.00 mcg/mL | 1563384 | 1563384 | 1563384 | 10.02 | | | | |

**Figure 2. Standard Curve for Perchlorate Ion Analysis for Samples Taken on the Last Day of Preparation.**

| Perchlorate Ion Conc in ng/mL | Mean Area-BKG Generated on 03/08/00 |
|---|---|
| 0.00 | 0 |
| 5.00 | 995180 |
| 10.00 | 1666842 |
| 20.00 | 2886462 |
| 50.00 | 8204100 |
| 100.00 | 15431972 |



# APPENDIX J

## THYROID WEIGHTS AND HISTOPATHOLOGY REPORTS

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

PRIMEDICA CORPORATION ARGUS
PROTOCOL NUMBER 1416-003
EPL PROJECT NUMBER 601-004

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

PATHOLOGY REPORT

Submitted by:
Experimental Pathology Laboratories, Inc.
P.O. Box 474
Herndon, VA 20172-0474
(703) 471-7060

Submitted to:
PRIMEDICA Corporation Argus
Horsham, PA 19044

November 8, 2000

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

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PATHOLOGY SUMMARY

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

PRIMEDICA CORPORATION ARGUS
PROTOCOL NUMBER 1416-003
EPL PROJECT NUMBER 601-004

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

## PATHOLOGY SUMMARY

The objectives of this study were: 1) to determine the teratogenicity of perchlorate in a second species (rat); 2) to measure TSH, $T_3$, $T_4$ changes in developing rats (fetal and neonate) and in adult female rats during pregnancy and lactation; 3) to measure neurohistological and thyroid effects at the same time points; and 4) to correlate these effects with hormone concentration changes at different stages of developing rats. The experimental design was as follows:

| Group | Dose Level mg/kg/d[a] | Gestation Day 21 (DG21) | | | Lactation Day 5 (DL5) | | | Lactation Day 10 (DL10) | | | Lactation Day 22 (DL22) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fetuses | | Adults | Pups | | Adults | Pups | | Adults | Pups | | Adults |
| | | M | F | F | M | F | F | M | F | F | M | F | F |
| I | 0 | 16 | 16 | 16 | 16 | 16 | - | 16 | 16 | 16 | 16 | 16 | 16 |
| II | 0.01 | 16 | 16 | 16 | 16 | 16 | - | 16 | 16 | 16 | 16 | 16 | 16 |
| III | 0.1 | 16 | 16 | 16 | 16 | 16 | - | 16 | 16 | 16 | 16[b] | 16[b] | 16[b] |
| IV | 1.0 | 16 | 16 | 16[b] | 16 | 16 | - | 16 | 16 | 16 | 16 | 16[b] | 16 |
| V | 30.0 | 16 | 16 | 16 | 16 | 16 | - | 16 | 16[b] | 16 | 16 | 16 | 16 |

[a]The test article was delivered in the drinking water two weeks prior to cohabitation until designated animal termination.
[b]Only 15 animals examined microscopically.

This pathology narrative reports only the findings in the thyroid glands from dams and fetuses/pups of all groups at all sacrifices as indicated above.

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Except for the gestational Day 21 male and female fetuses, the thyroid glands were dissected from the attached tissue, weighed on an electronic balance and weights recorded to four decimal places, and then processed routinely for standard hematoxylin and eosin staining and microscopic examination. The thyroids for gestational Day 21 male and female fetuses were left on the trachea, processed routinely, and longitudinal sections were taken of the trachea in the paraffin block in order to examine both thyroid lobes. The gestational Day 21 male and female fetuses did not have thyroid weights taken.

Microscopic findings for individual animals for the thyroid gland are presented in the Histopathology Incidence Tables. The histopathology procedure was as follows:

A. Colloid

1. Coded as DECREASED COLLOID based on:

a.

| Grade | % of follicles affected |
|---|---|
| 1 | 1-10 |
| 2 | 11-50 |
| 3 | 51-100 |

B. Follicular Cell Hypertrophy

1. Diagnosed **separately** from follicular cell hyperplasia and based on size of the cell (cytoplasmic to nuclear ratio)

a.

| Grade | Severity |
|---|---|
| 1 | Minimal |
| 2 | Mild |
| 3 | Moderate to severe |

C. Follicular Cell Hyperplasia

1. Only diagnosed when there is either stratification (multiple layers) or papillary infolding of single or multiple layers of follicular cells. Follicles at the perimeter of the examined thyroid lobes were generally excluded.
2. Coded as AREA AFFECTED
   a.

| Grade | % of Follicles Affected |
|---|---|
| 1 | 1-10 |
| 2 | 11-50 |
| 3 | 51-100 |

3. Coded as OVERALL SEVERITY
   a. The average severity of all the affected follicles with follicular cell hyperplasia
      1)

| Grade | Severity |
|---|---|
| 1 | Minimal |
| 2 | Mild |
| 3 | Moderate to severe |

4. Coded as GREATEST SEVERITY
   a. The severity grade given to the follicle with the most follicular cell hyperplasia. The severity of the follicular cell hyperplasia based on the complexity of the pattern of hyperplasia and/or multiplicity within the affected thyroid gland follicle.
   b. Grade description
      1) Simple papillary infolding of follicular epithelium usually with a capillary in its core.

2) Multiple papillary infolding with or without stratification of the follicular epithelium in other parts of the same thyroid follicle.
3) Hyperplasia of the follicular epithelium having a complex pattern (e.g., microfollicular pattern or extensive branching). The follicular cells may appear more basophilic. There is no compression due to the hyperplasia. Generally smaller and less complex than the follicular cell adenomas.

c. Example: If follicular cell hyperplasia is seen in 8 follicles (4 of minimal severity, 2 of mild severity and 2 of moderate severity):

Area Affected = 1% = 1
Overall Severity = 2 (rounded up from 1.75)
Greatest Severity = 3

Additionally, a few background lesions were documented and graded from 1 to 3 where 1 = minimal, 2 = mild, and 3 = moderate to severe.

All lesions were summarized by generation, sex, treatment group, and sacrifice interval in the Summary Incidence Tables together with the total number of animals in each group for the tissues examined. A tabulation of gross lesions observed at the time of gross trimming, with the corresponding microscopic change, was provided in the Correlation of Gross and Microscopic Findings tables.

## RESULTS

### Organ Weights

The absolute and relative (% body weight) thyroid weights in Group V dams were statistically significantly elevated at all intervals. The male pups showed significant increases in absolute thyroid weights in one group (Group V) at DL5 and DL22, and in all groups (Groups II-V) at DL10. The absolute thyroid weight for Group IV male pups was significantly decreased at DL22. The female pups showed significant increases in absolute thyroid weight in Group V at DL10 and Groups IV and V at DL22. The effect on the female pup absolute thyroid weight seemed to be less pronounced than in the male pups. Statistical results of body weights/thyroid weights appear as Appendix A.

### Gestational Day 21 (DG21)

Grade 2-3 decreased colloid was present in all Group V dams. Follicular cell hyperplasia was present in only two of the Group V adult females. Grade 1 follicular cell hypertrophy was present in 14 Group V dams.

Two male fetuses in Group II had Grade 2 decreased colloid. A dose-related increase in the severity of decreased colloid was observed in Groups IV and V male fetuses. Eleven male fetuses in Group IV had Grade 1 decreased colloid and one Group IV male fetus had Grade 2 decreased colloid. All Group V male fetuses had Grade 3 decreased colloid. Follicular cell hyperplasia was present in only one Group IV male fetus.

Grade 2 decreased colloid was present in one Group II female fetus. Grade 1 decreased colloid was present in one Group III female fetus. A dose-related increase in the severity of decreased colloid was present in Groups IV and V female fetuses. Twelve Group IV female fetuses had Grade 1 decreased

colloid and one Group IV female fetus had Grade 2 decreased colloid. All Group V female fetuses had Grade 3 decreased colloid. Follicular cell hyperplasia was present in only one Group IV female fetus.

Congestion was observed in one Group IV dam and one Group V female fetus. Congestion correlated with the gross observations of darkened or discolored lobes. Ultimobranchial cysts were noted in the thyroid of several of the female dams in all groups. Congestion and ultimobranchial cysts were considered to be incidental findings unrelated to treatment. Differences in the size of thyroid lobes or isthmus had no microscopic correlates.

**Day 5 of Lactation (DL5)**

No dams were sacrificed at Day 5 of lactation.

Grade 1 decreased colloid was present in two Group II male pups and four Group IV male pups. Grade 2-3 decreased colloid was present in all Group V male pups. Follicular cell hyperplasia was present in one Group III and two Group IV male pups.

Grade 1 decreased colloid was present in one Group IV female pup and Grade 2 decreased colloid was present in five Group IV female pups. Except for one Group V female pup with Grade 1 decreased colloid, all Group V female pups had Grade 2-3 decreased colloid. Follicular cell hyperplasia was present in one Group I, one Group II, four Group III, one Group IV, and one Group V female pups.

Ultimobranchial cysts were present in one Group III male pup and two Group II female pups and were considered to be incidental findings unrelated to treatment. Differences in the size of thyroid lobes had no microscopic correlates.

**Day 10 of Lactation (DL10**

Grade 1 decreased colloid was present in one Group II and one Group III dams. Grade 1 decreased colloid was present in four Group IV dams and Grade 2 decreased colloid was present in one Group IV dam. Grade 2-3 decreased colloid was present in all Group V dams. Follicular cell hyperplasia was present in one Group III, two Group IV, and nine Group V dams. Grade 1 follicular cell hypertrophy was present in one Group III and all Group V dams.

Grade 1 decreased colloid was present in one Group II, one Group III, and one Group IV male pups. Except for one Group V male pup with Grade 3 decreased colloid, all Group V male pups had Grade 1-2 decreased colloid. Follicular cell hyperplasia was present in two Group I, three Group IV, and one Group V male pups.

Grade 1 decreased colloid was present in one Group III and four Group IV female pups. Grade 1-3 decreased colloid was present in all Group V female pups for which the thyroid gland was present for microscopic examination. Follicular cell hyperplasia was present in one Group I female pup, one Group II female pup, one Group III female pup, and one Group V female pups.

Congestion was present in one Group V dam and was correlated to a gross observation of darkening. Ultimobranchial cysts were present in the thyroid of several dams in all groups, in one Group I female pup, and one Group II female pup. The congestion and ultimobranchial cysts were considered to be incidental and unrelated to treatment. Differences in the size of thyroid lobes had no microscopic correlates.

**Day 22 of Lactation (DL22)**

Grade 2 decreased colloid was present in one Group III dam. Grade 1 decreased colloid was present in one Group IV dam. Grade 2-3 decreased

colloid was present in all Group V dams. Follicular cell hyperplasia was present in three Group I, four Group II, five Group III, ten Group IV, and ten Group V dams. Grade 1-2 follicular cell hypertrophy was present in 14 Group V dams.

Grade 1-3 decreased colloid was present in 11 Group V male pups. Follicular cell hyperplasia was present in one Group II, one Group III, one Group IV, and three Group V male pups.

Grade 1-2 decreased colloid was present in 12 Group V female pups. Follicular cell hyperplasia was present in one Group I, three Group III, three Group IV, and one Group V female pups.

Ultimobranchial cysts present in several dams, male pups, and female pups in all groups and chronic focal inflammation in the thyroid of one Group IV dam were considered to be incidental findings unrelated to treatment. Differences in the size of thyroid lobes had no microscopic correlates.

## DISCUSSION AND CONCLUSIONS

At Gestational Day 21, an increased incidence of decreased colloid was present in Group V dams. In male and female fetuses, a dose-related increase in the incidence and severity of decreased colloid was present in Groups IV and V. No apparent effect was present in the incidence or severity of follicular cell hyperplasia in the dams or fetuses due to the low incidence in all groups. An increased incidence of follicular cell hypertrophy was present in Group V dams. Follicular cell hypertrophy was not observed in male or female fetuses.

At Day 5 of lactation, a dose-related increase in the incidence and severity of decreased colloid was present in male and female pups in Groups IV and V. No apparent effect on the incidence or severity of follicular cell hyperplasia was noted due to the low incidences in all groups of male and female pups. Follicular cell hypertrophy was not present in any male or female pups.

At Day 10 of lactation, a dose-related increase in incidence and severity of decreased colloid was present in Groups IV and V dams. An increased incidence of follicular cell hyperplasia and follicular cell hypertrophy was present in Group V dams. An increased incidence of decreased colloid was present in Group V male pups, and a dose-related increase in the incidence and severity of decreased colloid was present in Groups IV and V female pups. No apparent effect on the incidence or severity of follicular cell hyperplasia was present in male or female pups due to the low incidence in all groups. Follicular cell hypertrophy was not present in male or female pups.

At Day 22 of lactation, an increased incidence of decreased colloid was present in Group V dams. An increased incidence of follicular cell hyperplasia was present in Groups IV and V dams and an increased incidence of follicular cell hypertrophy was present in Group V dams. Male and female pups had an increased incidence of decreased colloid in Group V. No apparent effect on follicular cell hyperplasia was noted in male or female pups due to the low incidence and lack of a dose response. The significantly increased thyroid weights correlated to the follicular cell hypertrophy in Group V dams. Follicular cell hyperplasia may also have contributed to the increased thyroid weights in Group V dams. Follicular cell hypertrophy was not apparent by light microscopy morphological evaluation in male and female pups and, therefore, the statistically significant thyroid weights seen in pups had no obvious morphologic correlate.

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

PRIMEDICA Corporation Argus Project No. 1416-003

The no-observable effect level was 0.1 mg/kg/day (Group III) for thyroid treatment-related lesions.

KATHLEEN A. FUNK, DVM, PhD, Diplomate, ACVP
Veterinary Pathologist

11-8-00

KAF/wk

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

QUALITY ASSURANCE FINAL CERTIFICATION

Study Title: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or Via Maternal Milk

Client Study: 1416-003 EPL Project Coordinator: Dr. Kathleen A. Funk

EPL Project Number: 601-004 EPL Pathologist: Dr. Kathleen A. Funk

The following aspects of this study were inspected by the Quality Assurance Unit of Experimental Pathology Laboratories, Inc. Dates inspections were performed and findings reported to the EPL Project Coordinator and Management are indicated below.

| Area Inspected | Dates | |
|---|---|---|
| | Inspection | Reporting |
| EPL Project Sheets | 1/28/00; 5/9/00 | 1/28/00; 5/9/00 |
| Project Setup | 2/29/00; 3/3,15/00 | 2/29/00; 3/3,15/00 |
| Histology Setup | 3/2,6,16,17/00 | 3/2,6,16,17//00 |
| In-Process | 3/6/00 | 3/6/00 |
| Data Review | 3/9,10,13,17,20,21,27,29/00 | 3/9,10,13,17,20,21,27,29/00 |
| Draft Report | 4/25/00; 5/1,4,11,15,16,00; 6/9,12,13,16/00; 8/15,23/00 | 5/15,16/00; 6/12,16/00; 8/15,23/00 |
| Final Report | 11/14/00 | 11/14/00 |

Date reported to Study Director/Management 11/14/00

Date of last quarterly facility inspection 9/00

Patricia L. Runge 11/14/00

EPL Quality Assurance Unit Date

Form No. 6-2 (7/2/99)

SUMMARY INCIDENCE TABLES

GESTATION DAY 21 SACRIFICE

## SUMMARY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP I-DAM | GROUP II-DAM | GROUP III-DAM | GROUP IV-DAM | GROUP V-DAM | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (15) | (16) | |
| Congestion | | | | | 1 | |
| Cyst(s), Ultimobranchial | 6 | 11 | 8 | 6 | 5 | |
| Decreased Colloid | | | | | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | | | | 2 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | | | | 2 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | | | | 2 | |
| Hypertrophy, Follicular Cell | | | | | 14 | |

## SUMMARY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| | GROUP I-FETUS | GROUP II-FETUS | GROUP III-FETUS | GROUP IV-FETUS | GROUP V-FETUS | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Congestion | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | |
| Decreased Colloid | | 2 | | 12 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | | | 1 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | | | 1 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | | | 1 | | |
| Hypertrophy, Follicular Cell | | | | | | |

## SUMMARY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP I-FETUS | GROUP II-FETUS | GROUP III-FETUS | GROUP IV-FETUS | GROUP V-FETUS | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Congestion | | | | | 1 | |
| Cyst(s), Ultimobranchial | | | | | | |
| Decreased Colloid | | 1 | 1 | 13 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | | | 1 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | | | 1 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | | | 1 | | |
| Hypertrophy, Follicular Cell | | | | | | |

HISTOPATHOLOGY INCIDENCE TABLES

GESTATION DAY 21 SACRIFICE

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP
I-DAM

| ANIMAL | 1650 1 | 1650 2 | 1650 3 | 1650 4 | 1650 5 | 1650 6 | 1650 8 | 1650 9 | 1650 10 | 1650 13 | 1650 14 | 1650 15 | 1650 16 | 1650 19 | 1650 21 | 1650 22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | m | | X | | X | | X | X | X | | X | Xm | X | X | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | P | P | | P | | P | | | | P | | | | | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-1

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP
II-DAM

| ANIMAL | 1652 4 | 1652 5 | 1652 6 | 1652 8 | 1652 9 | 1653 1 | 1653 2 | 1653 5 | 1653 6 | 1653 9 | 1654 0 | 1654 1 | 1654 2 | 1654 4 | 1654 5 | 1654 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | | | X | | | | | | X | | | X | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | P | P | | P | P | P | P | P | | P | P | | P | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL
Experimental Pathology Laboratories, Inc.

II-2

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP III-DAM

| ANIMAL | 1647 | 1648 | 1650 | 1652 | 1653 | 1654 | 1655 | 1657 | 1659 | 1660 | 1661 | 1662 | 1663 | 1665 | 1666 | 1667 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | | X | X | X | | X | | X | X | X | | | | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | P | | | | P | | P | | | | P | P | P | P | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-3

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP IV-DAM

| ANIMAL | 1670 | 1671 | 1674 | 1675 | 1676 | 1677 | 1678 | 1679 | 1680 | 1681 | 1682 | 1683 | 1684 | 1687 | 1689 | 1692 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | | X | | | X | X | | X | N | X | | X | | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | P | | P | P | | | P | | | | P | | P | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP
V-DAM

| ANIMAL | 1653 | 1654 | 1656 | 1657 | 1658 | 1660 | 1661 | 1662 | 1665 | 1666 | 1668 | 1669 | 1670 | 1671 | 1673 | 1674 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | 3 | | |
| Cyst(s), Ultimobranchial | | | | | | | P | | | | P | P | | | P | P |
| Decreased Colloid | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | 1 | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | 1 | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | 1 | | | | 1 | | | | | |
| Hypertrophy, Follicular Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| | GROUP I-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1650-1-1 | 1650-2-1 | 1650-3-1 | 1650-4-1 | 1650-5-1 | 1650-6-1 | 1650-8-1 | 1650-9-1 | 1650-10-1 | 1650-13-1 | 1650-14-1 | 1650-15-1 | 1650-16-1 | 1650-19-1 | 1650-21-1 | 1650-22-1 |
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| | GROUP II-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1652 4-1 | 1652 5-1 | 1652 6-1 | 1652 8-1 | 1652 9-1 | 1653 1-1 | 1653 2-1 | 1653 5-1 | 1653 6-1 | 1653 9-1 | 1654 0-1 | 1654 1-1 | 1654 2-1 | 1654 4-1 | 1654 5-1 | 1654 6-1 |
| THYROID | X | | X | X | X | X | | X | X | X | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | 2 | | | | | 2 | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

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II-7

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| | GROUP III-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1654-1 | 1654-1 | 1655-1 | 1655-1 | 1655-1 | 1655-1 | 1655-1 | 1655-1 | 1655-1 | 1656-1 | 1656-1 | 1656-1 | 1656-1 | 1656-1 | 1656-1 | 1656-1 |
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-8

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| ANIMAL | GROUP IV-FETUS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | 1653-1 | | | | |
| THYROID | | | X | | | X | | | | X | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | 1 | 1 | | 1 | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | 2 | 1 | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | 1 | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | 1 | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | 1 | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-9

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Male Rat

| ANIMAL | 1653-1 | 1659-1 | 1659-1 | 1659-1 | 1659-1 | 1660-1 | 1660-1 | 1660-1 | 1660-1 | 1660-1 | 1660-1 | 1660-1 | 1661-1 | 1661-1 | 1661-1 | 1661-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROUP V-FETUS | | | | | | | | | | | | | | | | |
| THYROID | | | | | | m | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-10

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP I-FETUS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1650121-2 | 1650203-2 | 1650304-2 | 1650405-2 | 1650506-2 | 1650608-2 | 1650709-2 | 1651013-2 | 1651014-2 | 1651015-2 | 1651016-2 | 1651019-2 | 1652122-2 | | | | | | | |
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

II-11

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP II-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1652-2 | 1652-2 | 1652-2 | 1652-2 | 1652-2 | 1653-2 | 1653-2 | 1653-2 | 1653-2 | 1653-2 | 1654-2 | 1654-2 | 1654-2 | 1654-2 | 1654-2 | 1654-2 |
| THYROID | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | 2 | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

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II-12

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP III-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1654 7-2 | 1654 8-2 | 1655 0-2 | 1655 2-2 | 1655 3-2 | 1655 4-2 | 1655 5-2 | 1655 7-2 | 1655 9-2 | 1656 0-2 | 1656 1-2 | 1656 2-2 | 1656 3-2 | 1656 5-2 | 1656 6-2 | 1656 7-2 |
| THYROID | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

| | GROUP IV-FETUS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1653-2 | 1657-2 | 1674-2 | 1675-2 | 1676-2 | 1677-2 | 1678-2 | 1679-2 | 1680-2 | 1681-2 | 1682-2 | 1683-2 | 1684-2 | 1687-2 | 1689-2 | 1692-2 |
| THYROID | | | | | | | | | X | | | | | | X | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 2 | 1 | | 1 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | 1 | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

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II-14

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DG21 Sacrifice
Female Rat

GROUP
V-FETUS

| ANIMAL | 1653-2 | 1659-2 | 1659-2 | 1659-2 | 1659-2 | 1660-2 | 1660-2 | 1660-2 | 1660-2 | 1660-2 | 1660-2 | 1660-2 | 1661-2 | 1661-2 | 1661-2 | 1661-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | | | | | |
| Congestion | | | | | 3 | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

GESTATION DAY 21 SACRIFICE

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DG21 Sacrifice

Species: Rat Sex: Females Group Identification: V-DAM

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16611 | THYROID GLAND | Lobes and isthmus are discolored black (noted at gross trimming) | Congestion (THYROID) |

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DG21 Sacrifice

Species: Rat Sex: Females Group Identification: V-FETUS

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16597-2 | THYROID GLAND | One thyroid lobe is 2-3x larger than the other (noted at gross trimming) | No Correlating Lesion (THYROID) |
| 16598-2 | THYROID GLAND | One thyroid lobe darker than the other (noted at gross trimming) | Congestion (THYROID) |
| 16613-2 | THYROID GLAND | A distinct isthmus not seen; lobes almost appear continuous over trachea (noted at gross trimming) | No Correlating Lesion (THYROID) |

SUMMARY INCIDENCE TABLES

LACTATION DAY 5 SACRIFICE

## SUMMARY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Cyst(s), Ultimobranchial | | | 1 | | | |
| Decreased Colloid | | 2 | | 4 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | | 1 | 2 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | | 1 | 2 | | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | | 1 | 2 | | |

## SUMMARY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Cyst(s), Ultimobranchial | | 2 | | | | |
| Decreased Colloid | | | | 6 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | 1 | 1 | 4 | 1 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | 1 | 1 | 4 | 1 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | 1 | 1 | 4 | 1 | 1 | |

# HISTOPATHOLOGY INCIDENCE TABLES

## LACTATION DAY 5 SACRIFICE

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

GROUP
I-PUP

| ANIMAL | 1666-1 | 1667-1 | 1668-1 | 1669-1 | 1620-1 | 1621-1 | 1623-1 | 1625-1 | 1626-1 | 1629-1 | 1630-1 | 1631-1 | 1634-1 | 1635-1 | 1636-1 | 1637-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |

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V-1

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

GROUP
II-PUP

| ANIMAL | 1664-01 | 1664-11 | 1664-13 | 1664-14 | 1664-15 | 1664-16 | 1664-17 | 1664-19 | 1665-01 | 1665-11 | 1665-13 | 1665-14 | 1665-15 | 1665-16 | 1665-17 | 1665-19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | | X | Xm | X | X | X | | X | X | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | 1 | | | | | | 1 | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |

EPL
Experimental Pathology Laboratories, Inc.

V-2

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

| | GROUP III-PUP | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1662-1 | 1664-1 | 1665-1 | 1666-1 | 1667-1 | 1668-1 | 1669-1 | 1670-1 | 1673-1 | 1675-1 | 1676-1 | 1678-1 | 1679-1 | 1680-1 | 1681-1 | 1683-1 | | | | |
| THYROID | X | X | X | | X | X | X | X | X | X | X | X | X | X | | X | | | | |
| Cyst(s), Ultimobranchial | | | | P | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | 1 | | | | | |

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Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

GROUP IV-PUP

| ANIMAL | 1668 5-1 | 1668 6-1 | 1668 7-1 | 1668 8-1 | 1668 9-1 | 1669 0-1 | 1669 2-1 | 1669 3-1 | 1669 5-1 | 1669 6-1 | 1669 7-1 | 1669 8-1 | 1669 9-1 | 1670 1-1 | 1670 6-1 | 1670 7-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | X | X | X | X | X | X | X | X | | | X | X | | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | 1 | 1 | | | | | | | | | | 1 | | | 1 | |
| Follicular Cell Hyperplasia, Area Affected | 1 | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | 1 | | | | | | | | | | 1 | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | 1 | | | | | | | | | | 1 | | | | | |

EPL
Experimental Pathology Laboratories, Inc.

V-4

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Male Rat

GROUP
V-PUP

| ANIMAL | 1670809-1 | 1670911-1 | 1671112-1 | 1671313-1 | 1671515-1 | 1671616-1 | 1671717-1 | 1671818-1 | 1671919-1 | 1672222-1 | 1672323-1 | 1672424-1 | 1672525-1 | 1672828-1 | 1673030-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | |
| Decreased Colloid | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | |

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V-5

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

| | GROUP I-PUP | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1616-2 | 1617-2 | 1618-2 | 1619-2 | 1620-2 | 1621-2 | 1623-2 | 1625-2 | 1626-2 | 1629-2 | 1630-2 | 1631-2 | 1634-2 | 1635-2 | 1636-2 | 1637-2 |
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | 1 | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | 1 | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | 1 | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

| | GROUP II-PUP | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1664-2 | 1641-2 | 1643-2 | 1644-2 | 1645-2 | 1646-2 | 1647-2 | 1649-2 | 1650-2 | 1651-2 | 1653-2 | 1654-2 | 1655-2 | 1656-2 | 1657-2 | 1659-2 |
| THYROID | X | X | X | X | | X | X | X | X | X | X | | X | X | X | |
| Cyst(s), Ultimobranchial | | | | | P | | | | | | | | | | | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | 1 | | | | |

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Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

GROUP III-PUP

| ANIMAL | 1662-2 | 1664-2 | 1665-2 | 1666-2 | 1667-2 | 1668-2 | 1669-2 | 1670-2 | 1673-2 | 1675-2 | 1676-2 | 1678-2 | 1679-2 | 1680-2 | 1681-2 | 1683-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | | X | X | | X | | X | X | X | X | X | X | X | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | 1 | | | 1 | | 1 | | | | | | | | 1 |
| Follicular Cell Hyperplasia, Overall Severity | | | 1 | | | 1 | | 1 | | | | | | | | 2 |
| Follicular Cell Hyperplasia, Greatest Severity | | | 1 | | | 1 | | 1 | | | | | | | | 2 |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

| ANIMAL | 1668 5-2 | 1668 6-2 | 1668 7-2 | 1668 8-2 | 1668 9-2 | 1669 0-2 | 1669 2-2 | 1669 3-2 | 1669 5-2 | 1669 6-2 | 1669 7-2 | 1669 8-2 | 1669 9-2 | 1670 1-2 | 1670 6-2 | 1670 7-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GROUP IV-PUP | | | | | | | | | | | | | | | |
| THYROID | | | X | | X | | | X | X | X | X | | X | | X | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | 2 | 2 | | 2 | | 2 | 1 | | | | | | | 2 | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | 1 | | | | |

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V-9

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL5 Sacrifice
Female Rat

GROUP
V-PUP

| ANIMAL | 1670-2 | 1670-2 | 1671-2 | 1671-2 | 1671-2 | 1671-2 | 1671-2 | 1671-2 | 1671-2 | 1671-2 | 1672-2 | 1672-2 | 1672-2 | 1672-2 | 1672-2 | 1673-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | 1 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | 1 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | 1 | | | | | | | | | | | | |

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V-10

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

LACTATION DAY 5 SACRIFICE

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL5 Sacrifice

Species: Rat Sex: Males Group Identification: III-PUP

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16666-1 | THYROID | One thyroid lobe roughly 2x the size of the other (noted at gross trimming) | No Correlating Lesion |

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL5 Sacrifice

Species: Rat Sex: Males Group Identification: IV-PUP

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16701-1 | THYROID | One thyroid lobe approximately 2x larger than the other (noted at gross trimming) | No Correlating Lesion |

SUMMARY INCIDENCE TABLES

LACTATION DAY 10 SACRIFICE

## SUMMARY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

| | GROUP I-DAM | GROUP II-DAM | GROUP III-DAM | GROUP IV-DAM | GROUP V-DAM | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Congestion | | | | | 1 | |
| Cyst(s), Ultimobranchial | 6 | 5 | 7 | 5 | 7 | |
| Decreased Colloid | | 1 | 1 | 5 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | | 1 | 2 | 9 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | | 1 | 2 | 9 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | | 1 | 2 | 9 | |
| Hypertrophy, Follicular Cell | | | 1 | | 16 | |

## SUMMARY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Male Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (16) | |
| Congestion | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | |
| Decreased Colloid | | 1 | 1 | 1 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | 2 | | | 3 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | 2 | | | 3 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | 2 | | | 3 | 1 | |
| Hypertrophy, Follicular Cell | | | | | | |

## SUMMARY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (16) | (16) | (15) | |
| Congestion | | | | | | |
| Cyst(s), Ultimobranchial | 1 | 1 | | | | |
| Decreased Colloid | | | 1 | 4 | 15 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | 1 | 1 | 1 | | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | 1 | 1 | 1 | | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | 1 | 1 | 1 | | 1 | |
| Hypertrophy, Follicular Cell | | | | | | |

# HISTOPATHOLOGY INCIDENCE TABLES

## LACTATION DAY 10 SACRIFICE

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
I-DAM

| ANIMAL | 16616 | 16617 | 16618 | 16619 | 16620 | 16621 | 16623 | 16625 | 16626 | 16629 | 16630 | 16631 | 16634 | 16635 | 16636 | 16637 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | | X | X | | X | X | | X | X | | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | P | | | P | | | P | | | P | P | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
II-DAM

| ANIMAL | 1664 0 | 1664 1 | 1664 3 | 1664 4 | 1664 5 | 1664 6 | 1664 7 | 1664 9 | 1665 0 | 1665 1 | 1665 3 | 1665 4 | 1665 5 | 1665 6 | 1665 7 | 1665 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | | X | | | | X | | X | | X | X | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | P | P | P | | P | | P | | | | | |
| Decreased Colloid | | | 1 | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

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VIII-2

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
III-DAM

| ANIMAL | 1662 | 1664 | 1665 | 1666 | 1667 | 1668 | 1669 | 1670 | 1673 | 1675 | 1676 | 1678 | 1679 | 1680 | 1681 | 1683 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | X | X | | X | | | X | X | | X | X | X | | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | P | | | P | | P | P | | | P | | | | P | P | |
| Decreased Colloid | | | | | | | | | | | | | | | | 1 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | 1 |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | 3 |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | 3 |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | 1 |

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VIII-3

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP IV-DAM

| ANIMAL | 1665 | 1666 | 1667 | 1668 | 1669 | 1690 | 1692 | 1693 | 1695 | 1696 | 1697 | 1698 | 1699 | 1701 | 1706 | 1707 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | | X | X | | X | | X | X | | | | X | | | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | P | | | | | | | | P | P | P | | P | | |
| Decreased Colloid | | 1 | | | 1 | | 1 | | | | | 2 | | | 1 | |
| Follicular Cell Hyperplasia, Area Affected | | | | | 1 | | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | 2 | | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | 2 | | | | | 1 | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

VIII-4

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
V-DAM

| ANIMAL | 1668 | 1669 | 1671 | 1672 | 1673 | 1675 | 1676 | 1677 | 1678 | 1679 | 1682 | 1683 | 1684 | 1685 | 1688 | 1690 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | 2 | | | |
| Cyst(s), Ultimobranchial | P | P | P | | | | | P | P | | | P | | P | | |
| Decreased Colloid | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| Follicular Cell Hyperplasia, Area Affected | | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | 2 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | 2 | 1 | 2 | 1 | 1 | 2 | | 2 | 1 | 1 | | | | |
| Hypertrophy, Follicular Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

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VIII-5

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Male Rat

| | GROUP I-PUP | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 166116-110-1 | 166117-110-1 | 166118-110-1 | 166119-110-1 | 166120-110-1 | 166221-110-1 | 166223-110-1 | 166225-110-1 | 166226-110-1 | 166229-110-1 | 166330-110-1 | 166331-110-1 | 166334-110-1 | 166335-110-1 | 166336-110-1 | 166337-110-1 |
| THYROID | X | X | | | X | X | X | X | X | X | X | X | Xm | X | X | X |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | 1 | 1 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | 1 | 1 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | 1 | 1 | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

VIII-6

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Male Rat

GROUP
II-PUP

| ANIMAL | 16640-10-1 | 16641-10-1 | 16643-10-1 | 16644-10-1 | 16645-10-1 | 16646-10-1 | 16647-10-1 | 16649-10-1 | 16650-10-1 | 16651-10-1 | 16653-10-1 | 16654-10-1 | 16655-10-1 | 16656-10-1 | 16657-10-1 | 16659-10-1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | 1 | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

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VIII-7

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

GROUP III-PUP

1416-003
DL10 Sacrifice
Male Rat

| ANIMAL | 1662-101 | 1664-101 | 1665-101 | 1666-101 | 1667-101 | 1668-101 | 1669-101 | 1670-101 | 1673-101 | 1675-101 | 1676-101 | 1678-101 | 1679-101 | 1680-101 | 1681-101 | 1683-101 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

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VIII-8

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Male Rat

GROUP IV-PUP

| ANIMAL | 166851-110-1 | 166861-110-1 | 166871-110-1 | 166881-110-1 | 166891-110-1 | 169901-110-1 | 169921-110-1 | 169931-110-1 | 169951-110-1 | 169961-110-1 | 169971-110-1 | 169981-110-1 | 169991-110-1 | 167011-110-1 | 167061-110-1 | 167071-110-1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | | | | X | | X | X | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | 1 | 1 | 1 | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | 2 | 1 | 1 | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | 2 | 1 | 1 | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

VIII-9

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Male Rat

GROUP
V-PUP

| ANIMAL | 167081-10-1 | 167091-10-1 | 167111-10-1 | 167121-10-1 | 167131-10-1 | 167151-10-1 | 167161-10-1 | 167171-10-1 | 167181-10-1 | 167191-10-1 | 167221-10-1 | 167231-10-1 | 167241-10-1 | 167251-10-1 | 167281-10-1 | 167301-10-1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | 2 | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | 2 | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

EPL Experimental Pathology Laboratories, Inc.

VIII-10

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
I-PUP

| ANIMAL | 16616-10-2 | 16617-10-2 | 16618-10-2 | 16619-10-2 | 16620-10-2 | 16621-10-2 | 16623-10-2 | 16625-10-2 | 16626-10-2 | 16629-10-2 | 16630-10-2 | 16631-10-2 | 16634-10-2 | 16635-10-2 | 16636-10-2 | 16637-10-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | P | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | 1 | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | 2 | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | 2 | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

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VIII-11

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP II-PUP

| ANIMAL | 16640-10-2 | 16641-10-2 | 16643-10-2 | 16644-10-2 | 16645-10-2 | 16646-10-2 | 16647-10-2 | 16649-10-2 | 16650-10-2 | 16651-10-2 | 16653-10-2 | 16654-10-2 | 16655-10-2 | 16656-10-2 | 16657-10-2 | 16659-10-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | Xm | X | X | X | X | X | X | X | X | | X | X | X | X | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | P | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | 1 | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | 2 | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | 2 | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

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VIII-12

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP III-PUP

| ANIMAL | 1662-10-2 | 1664-10-2 | 1665-10-2 | 1666-10-2 | 1667-10-2 | 1668-10-2 | 1669-10-2 | 1670-10-2 | 1673-10-2 | 1675-10-2 | 1676-10-2 | 1678-10-2 | 1679-10-2 | 1680-10-2 | 1681-10-2 | 1683-10-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | 1 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | 1 | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | 2 | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | 2 | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |

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VIII-13

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP IV-PUP

| ANIMAL | 166851-10-2 | 166861-10-2 | 166871-10-2 | 166881-10-2 | 166891-10-2 | 166901-10-2 | 166921-10-2 | 166931-10-2 | 166951-10-2 | 166961-10-2 | 166971-10-2 | 166981-10-2 | 166991-10-2 | 167011-10-2 | 167061-10-2 | 167071-10-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | | X | X | X | | X | X | X | | X | X | X | | X | X | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | | | | | |
| Decreased Colloid | | 1 | | | | 1 | | | | 1 | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL10 Sacrifice
Female Rat

GROUP
V-PUP

| ANIMAL | 16708-10-2 | 16709-10-2 | 16711-10-2 | 16712-10-2 | 16713-10-2 | 16715-10-2 | 16716-10-2 | 16717-10-2 | 16718-10-2 | 16719-10-2 | 16722-10-2 | 16723-10-2 | 16724-10-2 | 16725-10-2 | 16728-10-2 | 16730-10-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | m | | | | | | N | | | | | | |
| Congestion | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | | |
| Decreased Colloid | 2 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 3 | | 2 | 3 | 3 | 2 | 3 | 1 |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | 1 | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

LACTATION DAY 10 SACRIFICE

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL10 Sacrifice

Species: Rat Sex: Females Group Identification: IV-DAM

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16686 | THYROID | One thyroid lobe smaller than the other (noted at gross trimming) | No Correlating Lesion |
| 16689 | THYROID | One thyroid lobe slightly smaller than the other (noted at gross trimming) | No Correlating Lesion |
| 16706 | THYROID | One thyroid lobe smaller than the other (noted at gross trimming) | No Correlating Lesion |

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL10 Sacrifice

Species: Rat Sex: Females Group Identification: V-DAM

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16724 | THYROID | Lobes slightly dark (noted at gross trimming) | Congestion |

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL10 Sacrifice

Species: Rat Sex: Males Group Identification: II-PUP

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16647-10-1 | THYROID | One thyroid lobe smaller than the other (noted at gross trimming) | No Correlating Lesion |

SUMMARY INCIDENCE TABLES

LACTATION DAY 22 SACRIFICE

## SUMMARY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

| | GROUP I-DAM | GROUP II-DAM | GROUP III-DAM | GROUP IV-DAM | GROUP V-DAM | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (15) | (16) | (16) | |
| Cyst(s), Ultimobranchial | 12 | 4 | 7 | 13 | 10 | |
| Decreased Colloid | | | 1 | 1 | 16 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | 3 | 4 | 5 | 10 | 10 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | 3 | 4 | 5 | 10 | 10 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | 3 | 4 | 5 | 10 | 10 | |
| Hypertrophy, Follicular Cell | | | | | 14 | |
| Inflammation, Chronic, Focal | | | | 1 | | |

## SUMMARY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (15) | (16) | (16) | |
| Cyst(s), Ultimobranchial | 1 | 3 | 3 | 4 | 2 | |
| Decreased Colloid | | | | | 11 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | | 1 | 1 | 1 | 3 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | | 1 | 1 | 1 | 3 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | | 1 | 1 | 1 | 3 | |
| Hypertrophy, Follicular Cell | | | | | | |
| Inflammation, Chronic, Focal | | | | | | |

## SUMMARY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

| | GROUP I-PUP | GROUP II-PUP | GROUP III-PUP | GROUP IV-PUP | GROUP V-PUP | |
|---|---|---|---|---|---|---|
| THYROID (NO. EXAMINED) | (16) | (16) | (15) | (15) | (16) | |
| Cyst(s), Ultimobranchial | 4 | 3 | 5 | 1 | 3 | |
| Decreased Colloid | | | | | 12 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Area Affected | 1 | | 3 | 3 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Overall Severity | 1 | | 3 | 3 | 1 | |
| Follicular Cell Hyperplasia, | | | | | | |
| Greatest Severity | 1 | | 3 | 3 | 1 | |
| Hypertrophy, Follicular Cell | | | | | | |
| Inflammation, Chronic, Focal | | | | | | |

# HISTOPATHOLOGY INCIDENCE TABLES

## LACTATION DAY 22 SACRIFICE

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP
I-DAM

| ANIMAL | 16731 | 16732 | 16734 | 16735 | 16736 | 16737 | 16738 | 16740 | 16741 | 16742 | 16745 | 16746 | 16747 | 16749 | 16750 | 16753 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | X | | | | | | X | | | |
| Cyst(s), Ultimobranchial | | P | P | P | P | P | | P | P | P | P | | | P | P | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | 1 | | | | 1 | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Overall Severity | 1 | | | | 1 | | | | | | | 1 | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | 1 | | | | 1 | | | | | | | 1 | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |

EPL
Experimental Pathology Laboratories, Inc.

XI-1

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

| | GROUP II-DAM | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 16755 | 16758 | 16760 | 16761 | 16762 | 16763 | 16764 | 16765 | 16767 | 16768 | 16769 | 16770 | 16771 | 16773 | 16774 | 16776 | | | | |
| THYROID | X | X | X | X | | | X | | | X | | X | | | | X | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | | P | | P | | P | | P | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | 1 | 1 | | 1 | | | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | 1 | 2 | | 1 | | | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | 1 | 2 | | 2 | | | | | | 1 | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP III-DAM

| ANIMAL | 1678 1 | 1678 2 | 1678 3 | 1678 4 | 1678 6 | 1678 7 | 1679 1 | 1679 2 | 1679 3 | 1679 4 | 1679 5 | 1679 6 | 1679 7 | 1679 8 | 1679 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | | | | | | | | X | | X | | X | | |
| Cyst(s), Ultimobranchial | | P | | | P | P | | P | | P | | P | | | P |
| Decreased Colloid | | | 2 | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | 1 | | | 1 | | | 1 | | | | 1 | 1 |
| Follicular Cell Hyperplasia, Overall Severity | | | | 2 | | | 1 | | | 1 | | | | 1 | 1 |
| Follicular Cell Hyperplasia, Greatest Severity | | | | 2 | | | 1 | | | 1 | | | | 1 | 1 |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | |

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XI-3

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP IV-DAM

| ANIMAL | 16800 | 16801 | 16802 | 16803 | 16805 | 16806 | 16807 | 16808 | 16810 | 16811 | 16814 | 16815 | 16817 | 16818 | 16820 | 16822 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | X | | | | | | | | | |
| Cyst(s), Ultimobranchial | P | P | P | P | P | P | | P | P | P | | P | P | P | P | |
| Decreased Colloid | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | 1 | | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | | | 1 |
| Follicular Cell Hyperplasia, Overall Severity | 3 | | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 2 | | | 3 |
| Follicular Cell Hyperplasia, Greatest Severity | 3 | | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 2 | | | 3 |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | 1 | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP
V-DAM

| ANIMAL | 1683 | 1685 | 1686 | 1687 | 1688 | 1690 | 1691 | 1693 | 1694 | 1696 | 1697 | 1699 | 1640 | 1642 | 1643 | 1644 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | | | | | |
| Cyst(s), Ultimobranchial | | P | P | P | | P | P | | P | P | P | P | | | P | |
| Decreased Colloid | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 |
| Follicular Cell Hyperplasia, Area Affected | | | 1 | | 1 | 1 | 1 | | 1 | | 1 | 1 | | 1 | 1 | 1 |
| Follicular Cell Hyperplasia, Overall Severity | | | 2 | | 1 | 2 | 1 | | 1 | | 1 | 1 | | 2 | 1 | 1 |
| Follicular Cell Hyperplasia, Greatest Severity | | | 2 | | 1 | 3 | 1 | | 1 | | 1 | 2 | | 3 | 2 | 1 |
| Hypertrophy, Follicular Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | | 1 | 1 | | 2 |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |

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XI-5

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

GROUP
I-PUP

| ANIMAL | 1673 1-1 | 1673 2-1 | 1673 4-1 | 1673 5-1 | 1673 6-1 | 1673 7-1 | 1673 8-1 | 1674 0-1 | 1674 1-1 | 1674 2-1 | 1674 5-1 | 1674 6-1 | 1674 7-1 | 1674 9-1 | 1675 0-1 | 1675 3-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X |
| Cyst(s), Ultimobranchial | | | | | | | | | | | | | | | P | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac /death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

| | GROUP II-PUP | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1675-1 | 1675-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1676-1 | 1677-1 | 1677-1 | 1677-1 | 1677-1 | 1677-1 |
| THYROID | X | X | X | | X | X | | X | | X | X | X | X | X | X | X |
| Cyst(s), Ultimobranchial | | | | P | | | P | | P | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | 1 | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | 2 | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | 2 | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

GROUP III-PUP

| ANIMAL | 1678-1 | 1678-1 | 1678-1 | 1678-1 | 1678-1 | 1678-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 | 1679-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | | | | X | X | X | X | | X | X |
| Cyst(s), Ultimobranchial | | | | | | P | | P | | | | | P | | |
| Decreased Colloid | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | 1 | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | |



Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

| | GROUP IV-PUP | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1680-1 | 1681-1 | 1681-1 | 1681-1 | 1681-1 | 1681-1 | 1681-1 | 1682-1 | 1682-1 | | | |
| THYROID | X | X | X | X | X | X | X | | X | X | X | | X | | X | | | | | |
| Cyst(s), Ultimobranchial | | | | | | | | P | | | | P | | P | | P | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | 1 | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | | | | | |



Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Male Rat

GROUP
V-PUP

| ANIMAL | 16823-1 | 16825-1 | 16826-1 | 16827-1 | 16828-1 | 16830-1 | 16831-1 | 16833-1 | 16834-1 | 16836-1 | 16837-1 | 16839-1 | 16840-1 | 16842-1 | 16843-1 | 16844-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | X | | | | | X | X | | X |
| Cyst(s), Ultimobranchial | | | | P | | | | | | | P | | | | | |
| Decreased Colloid | 2 | | 1 | 2 | 1 | 2 | 1 | | 1 | 1 | 3 | 1 | | | 1 | |
| Follicular Cell Hyperplasia, Area Affected | 1 | 1 | 1 | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | 2 | 1 | 1 | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | 2 | 1 | 1 | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |

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XI-10

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP
I-PUP

| ANIMAL | 16731-2 | 16732-2 | 16734-2 | 16735-2 | 16736-2 | 16737-2 | 16738-2 | 16740-2 | 16741-2 | 16742-2 | 16745-2 | 16746-2 | 16747-2 | 16749-2 | 16750-2 | 16753-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | X | X | X | X | X | | X | | X | | X | | | X | X | X |
| Cyst(s), Ultimobranchial | | | | | | P | | P | | | | P | P | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | 2 | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | 2 | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |

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XI-11

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

| | GROUP II-PUP | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 1675-2 | 1675-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1676-2 | 1677-2 | 1677-2 | 1677-2 | 1677-2 | 1677-2 |
| THYROID | X | X | X | | X | X | X | X | X | | X | X | X | X | X | |
| Cyst(s), Ultimobranchial | | | | P | | | | | | P | | | | | | P |
| Decreased Colloid | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | |

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XI-12

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP
III-PUP

| ANIMAL | 1678-2 | 1682-2 | 1683-2 | 1684-2 | 1686-2 | 1687-2 | 1691-2 | 1692-2 | 1693-2 | 1694-2 | 1695-2 | 1696-2 | 1697-2 | 1698-2 | 1699-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | X | | X | X | X | X | | | | X | X | | |
| Cyst(s), Ultimobranchial | | P | | P | | | | | | | P | | | P | P |
| Decreased Colloid | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | 1 | | | | | | | | 1 | 1 | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | 1 | | | | | | | | 2 | 1 | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | 1 | | | | | | | | 2 | 1 | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | |

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XI-13

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

| | GROUP IV-PUP | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL | 16800-2 | 16801-2 | 16802-2 | 16803-2 | 16805-2 | 16806-2 | 16807-2 | 16808-2 | 16810-2 | 16811-2 | 16814-2 | 16815-2 | 16817-2 | 16818-2 | 16820-2 | 16822-2 | | | | |
| THYROID | X | X | Xm | X | X | | X | | | X | X | | N | X | X | X | | | | |
| Cyst(s), Ultimobranchial | | | | | | P | | | | | | | | | | | | | | |
| Decreased Colloid | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, | | | | | | | | | | | | | | | | | | | | |
| Area Affected | | | | | | | | 1 | 1 | | | 1 | | | | | | | | |
| Follicular Cell Hyperplasia, | | | | | | | | | | | | | | | | | | | | |
| Overall Severity | | | | | | | | 2 | 2 | | | 2 | | | | | | | | |
| Follicular Cell Hyperplasia, | | | | | | | | | | | | | | | | | | | | |
| Greatest Severity | | | | | | | | 2 | 2 | | | 2 | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | | | | | |

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XI-14

Key: X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

# HISTOPATHOLOGY INCIDENCE TABLE

1416-003
DL22 Sacrifice
Female Rat

GROUP
V-PUP

| ANIMAL | 1682 3-2 | 1682 5-2 | 1682 6-2 | 1682 7-2 | 1682 8-2 | 1683 0-2 | 1683 1-2 | 1683 3-2 | 1683 4-2 | 1683 6-2 | 1683 7-2 | 1683 9-2 | 1684 0-2 | 1684 2-2 | 1684 3-2 | 1684 4-2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THYROID | | | | | | | | | | | | X | X | | X | X | | | | |
| Cyst(s), Ultimobranchial | | P | | P | | | P | | | | | | | | | | | | | |
| Decreased Colloid | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | | | 1 | | | | | | |
| Follicular Cell Hyperplasia, Area Affected | | | 1 | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Overall Severity | | | 2 | | | | | | | | | | | | | | | | | |
| Follicular Cell Hyperplasia, Greatest Severity | | | 2 | | | | | | | | | | | | | | | | | |
| Hypertrophy, Follicular Cell | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic, Focal | | | | | | | | | | | | | | | | | | | | |

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XI-15

Key X=Not Remarkable N=No Section I=Incomplete A=Autolysis
P=Present B=Benign M=Malignant
m=missing one paired organ u=unscheduled sac./death

CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

LACTATION DAY 22 SACRIFICE

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL22 Sacrifice

Species: Rat Sex: Females Group Identification: II-DAM

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16762 | THYROID | One lobe roughly 2x the size of the other (noted at gross trimming) | No Correlating Lesion |

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XII-1

# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL22 Sacrifice

Species: Rat Sex: Females Group Identification: V-DAM

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16842 | THYROID | One thyroid smaller than the other (noted at gross trimming) | No Correlating Lesion |

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# CORRELATION OF GROSS AND MICROSCOPIC FINDINGS

1416-003
DL22 Sacrifice

Species: Rat Sex: Males Group Identification: I-PUP

| Animal Number | Client Topography / Site | Client Gross Observations | Microscopic Observations |
|---|---|---|---|
| 16741-1 | THYROID | One thyroid smaller than the other (noted at gross trimming) | No Correlating Lesion |

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# APPENDIX A
# SUMMARY AND INDIVIDUAL THYROID WEIGHTS

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DAMS

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

## STATISTICAL RESULTS OF BODY WEIGHTS/THYROID WEIGHTS

Project ID 1416-003 DAMS (GESTATION DAY 21)

| Group | Body Weight (g) | | Group | AbsoluteThyroid Weight (g) | | Group | Relative Thyroid/ Body Weight+ | |
|---|---|---|---|---|---|---|---|---|
| 1 | X | 412.5 | 1 | X | .01836 | 1 | X | .00004 |
| | SD | 21.14 | | SD | .003099 | | SD | .000008 |
| | N | 16 | | N | 14 | | N | 14 |
| 2 | X | 423.2 | 2 | X | .01881 | 2 | X | .00004 |
| | SD | 29.56 | | SD | .003071 | | SD | .000007 |
| | N | 16 | | N | 16 | | N | 16 |
| 3 | X | 423.8 | 3 | X | .02048 | 3 | X | .00005 |
| | SD | 22.34 | | SD | .002934 | | SD | .000006 |
| | N | 16 | | N | 16 | | N | 16 |
| 4 | X | 424.0 | 4 | X | .02149 | 4 | X | .00005 |
| | SD | 36.52 | | SD | .003684 | | SD | .000007 |
| | N | 16 | | N | 15 | | N | 15 |
| 5 | X | 427.0 | 5 | X | .02628** | 5 | X | .00006** |
| | SD | 32.97 | | SD | .003847 | | SD | .000009 |
| | N | 16 | | N | 16 | | N | 16 |

DAMS (LACTATION DAY 10)

| Group | Body Weight (g) | | Group | AbsoluteThyroid Weight (g) | | Group | Relative Thyroid/ Body Weight+ | |
|---|---|---|---|---|---|---|---|---|
| 1 | X | 343.6 | 1 | X | .02053 | 1 | X | .00006 |
| | SD | 20.76 | | SD | .003679 | | SD | .000011 |
| | N | 16 | | N | 16 | | N | 16 |
| 2 | X | 339.8 | 2 | X | .02015 | 2 | X | .00006 |
| | SD | 22.01 | | SD | .003736 | | SD | .000011 |
| | N | 16 | | N | 15 | | N | 15 |
| 3 | X | 330.9 | 3 | X | .01878 | 3 | X | .00006 |
| | SD | 20.62 | | SD | .003286 | | SD | .000011 |
| | N | 16 | | N | 16 | | N | 16 |
| 4 | X | 330.8 | 4 | X | .01949 | 4 | X | .00006 |
| | SD | 27.39 | | SD | .003714 | | SD | .000012 |
| | N | 16 | | N | 16 | | N | 16 |
| 5 | X | 340.2 | 5 | X | .03007** | 5 | X | .00009** |
| | SD | 21.20 | | SD | .003094 | | SD | .000011 |
| | N | 16 | | N | 16 | | N | 16 |

** = p≤.01 +Summary values rounded for reporting purposes

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

STATISTICAL RESULTS OF BODY WEIGHTS/THYROID WEIGHTS

Project ID 1416-003 DAMS (LACTATION DAY 22)

| Group | Body Weight (g) | | Group | AbsoluteThyroid Weight (g) | | Group | Relative Thyroid/ Body Weight+ | |
|---|---|---|---|---|---|---|---|---|
| 1 | X | 329.6 | 1 | X | .02114 | 1 | X | .00006 |
| | SD | 20.56 | | SD | .002920 | | SD | .000009 |
| | N | 16 | | N | 16 | | N | 16 |
| 2 | X | 336.3 | 2 | X | .02084 | 2 | X | .00006 |
| | SD | 26.64 | | SD | .003030 | | SD | .000008 |
| | N | 16 | | N | 16 | | N | 16 |
| 3 | X | 330.5 | 3 | X | .02237 | 3 | X | .00007 |
| | SD | 18.21 | | SD | .004044 | | SD | .000012 |
| | N | 15 | | N | 15 | | N | 15 |
| 4 | X | 325.8 | 4 | X | .02017 | 4 | X | .00006 |
| | SD | 25.03 | | SD | .003627 | | SD | .000009 |
| | N | 16 | | N | 16 | | N | 16 |
| 5 | X | 333.6 | 5 | X | .03054** | 5 | X | .00009** |
| | SD | 23.98 | | SD | .003636 | | SD | .000011 |
| | N | 16 | | N | 16 | | N | 16 |

** = p≤.01 +Summary values rounded for reporting purposes

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Gestation Day 21 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DG21 Sacrifice

| Group | Animal ID | Total Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| I-Dam | 16501 | 400 | .0161 | 0.00004025 |
| I-Dam | 16502 | 432 | .0114[a] | N/A |
| I-Dam | 16503 | 410 | .0196 | 0.00004780 |
| I-Dam | 16504 | 407 | .0188 | 0.00004619 |
| I-Dam | 16505 | 392 | .0188 | 0.00004796 |
| I-Dam | 16506 | 428 | .0150 | 0.00003505 |
| I-Dam | 16508 | 419 | .0184 | 0.00004391 |
| I-Dam | 16509 | 372 | .0142 | 0.00003817 |
| I-Dam | 16510 | 443 | .0224 | 0.00005056 |
| I-Dam | 16513 | 419 | .0134 | 0.00003198 |
| I-Dam | 16514 | 423 | .0159 | 0.00003759 |
| I-Dam | 16515 | 388 | .0214 | 0.00005515 |
| I-Dam | 16516 | 402 | .0173[a] | N/A |
| I-Dam | 16519 | 392 | .0238 | 0.00006071 |
| I-Dam | 16521 | 422 | .0195 | 0.00004621 |
| I-Dam | 16522 | 451 | .0198 | 0.00004390 |
| II-Dam | 16524 | 374 | .0210 | 0.00005615 |
| II-Dam | 16525 | 468 | .0250 | 0.00005342 |
| II-Dam | 16526 | 432 | .0173 | 0.00004005 |
| II-Dam | 16528 | 390 | .0169 | 0.00004333 |
| II-Dam | 16529 | 480 | .0175 | 0.00003646 |
| II-Dam | 16531 | 432 | .0196 | 0.00004537 |
| II-Dam | 16532 | 428 | .0176 | 0.00004112 |
| II-Dam | 16535 | 457 | .0179 | 0.00003917 |
| II-Dam | 16536 | 395 | .0153 | 0.00003873 |
| II-Dam | 16539 | 409 | .0165 | 0.00004034 |
| II-Dam | 16540 | 393 | .0199 | 0.00005064 |
| II-Dam | 16541 | 421 | .0187 | 0.00004442 |
| II-Dam | 16542 | 423 | .0164 | 0.00003877 |
| II-Dam | 16544 | 396 | .0165 | 0.00004167 |
| II-Dam | 16545 | 440 | .0264 | 0.00006000 |
| II-Dam | 16546 | 433 | .0184 | 0.00004249 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Gestation Day 21 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DG21 Sacrifice

| Group | Animal ID | Total Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| III-Dam | 16547 | 416 | .0195 | 0.00004688 |
| III-Dam | 16548 | 466 | .0217 | 0.00004657 |
| III-Dam | 16550 | 438 | .0226 | 0.00005160 |
| III-Dam | 16552 | 451 | .0205 | 0.00004545 |
| III-Dam | 16553 | 426 | .0242 | 0.00005681 |
| III-Dam | 16554 | 423 | .0208 | 0.00004917 |
| III-Dam | 16555 | 400 | .0204 | 0.00005100 |
| III-Dam | 16557 | 431 | .0269 | 0.00006241 |
| III-Dam | 16559 | 438 | .0234 | 0.00005342 |
| III-Dam | 16560 | 420 | .0185 | 0.00004405 |
| III-Dam | 16561 | 430 | .0169 | 0.00003930 |
| III-Dam | 16562 | 418 | .0199 | 0.00004761 |
| III-Dam | 16563 | 376 | .0155 | 0.00004122 |
| III-Dam | 16565 | 414 | .0173 | 0.00004179 |
| III-Dam | 16566 | 442 | .0214 | 0.00004842 |
| III-Dam | 16567 | 391 | .0181 | 0.00004629 |
| IV-Dam | 16570 | 374 | .0228 | 0.00006096 |
| IV-Dam | 16571 | 456 | .0264 | 0.00005789 |
| IV-Dam | 16574 | 394 | .0205 | 0.00005203 |
| IV-Dam | 16575 | 431 | .0190 | 0.00004408 |
| IV-Dam | 16576 | 411 | .0226 | 0.00005499 |
| IV-Dam | 16577 | 404 | .0201 | 0.00004975 |
| IV-Dam | 16578 | 354 | .0172 | 0.00004859 |
| IV-Dam | 16579 | 470 | .0240 | 0.00005106 |
| IV-Dam | 16580 | 439 | .0273 | 0.00006219 |
| IV-Dam | 16581 | 440 | Thyroids Missing | N/A |
| IV-Dam | 16582 | 403 | .0190 | 0.00004715 |
| IV-Dam | 16583 | 474 | .0245 | 0.00005169 |
| IV-Dam | 16584 | 434 | .0158 | 0.00003641 |
| IV-Dam | 16587 | 474 | .0264 | 0.00005570 |
| IV-Dam | 16589 | 442 | .0199 | 0.00004502 |
| IV-Dam | 16592 | 384 | .0169 | 0.00004401 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Gestation Day 21 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DG21 Sacrifice

| Group | Animal ID | Total Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| V-Dam | 16593 | 405 | .0274 | 0.00006765 |
| V-Dam | 16594 | 453 | .0320 | 0.00007064 |
| V-Dam | 16596 | 445 | .0209 | 0.00004697 |
| V-Dam | 16597 | 373 | .0237 | 0.00006354 |
| V-Dam | 16598 | 434 | .0287 | 0.00006613 |
| V-Dam | 16600 | 426 | .0290 | 0.00006808 |
| V-Dam | 16601 | 369 | .0218 | 0.00005908 |
| V-Dam | 16602 | 442 | .0253 | 0.00005724 |
| V-Dam | 16605 | 393 | .0332 | 0.00008448 |
| V-Dam | 16606 | 447 | .0225 | 0.00005034 |
| V-Dam | 16608 | 437 | .0237 | 0.00005423 |
| V-Dam | 16609 | 410 | .0242 | 0.00005902 |
| V-Dam | 16610 | 468 | .0277 | 0.00005919 |
| V-Dam | 16611 | 407 | .0234 | 0.00005749 |
| V-Dam | 16613 | 431 | .0249 | 0.00005777 |
| V-Dam | 16614 | 492 | .0320 | 0.00006504 |

[a]Excluded from statistical analyses - only one thyroid present.
N/A = Not applicable.

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| I-Dam | 16616 | 327 | .0216 | 0.00006606 |
| I-Dam | 16617 | 343 | .0146 | 0.00004257 |
| I-Dam | 16618 | 397 | .0228 | 0.00005743 |
| I-Dam | 16619 | 342 | .0202 | 0.00005906 |
| I-Dam | 16620 | 326 | .0168 | 0.00005153 |
| I-Dam | 16621 | 314 | .0170 | 0.00005414 |
| I-Dam | 16623 | 362 | .0208 | 0.00005746 |
| I-Dam | 16625 | 345 | .0218 | 0.00006319 |
| I-Dam | 16626 | 365 | .0225 | 0.00006164 |
| I-Dam | 16629 | 339 | .0181 | 0.00005339 |
| I-Dam | 16630 | 353 | .0244 | 0.00006912 |
| I-Dam | 16631 | 356 | .0168 | 0.00004719 |
| I-Dam | 16634 | 324 | .0177 | 0.00005463 |
| I-Dam | 16635 | 350 | .0195 | 0.00005571 |
| I-Dam | 16636 | 336 | .0284 | 0.00008452 |
| I-Dam | 16637 | 319 | .0254 | 0.00007962 |
| II-Dam | 16640 | 365 | .0198 | 0.00005425 |
| II-Dam | 16641 | 309 | Excluded[a] | N/A |
| II-Dam | 16643 | 315 | .0200 | 0.00006349 |
| II-Dam | 16644 | 366 | .0142 | 0.00003880 |
| II-Dam | 16645 | 351 | .0242 | 0.00006895 |
| II-Dam | 16646 | 324 | .0227 | 0.00007006 |
| II-Dam | 16647 | 330 | .0160 | 0.00004848 |
| II-Dam | 16649 | 375 | .0251 | 0.00006693 |
| II-Dam | 16650 | 329 | .0206 | 0.00006261 |
| II-Dam | 16651 | 312 | .0156 | 0.00005000 |
| II-Dam | 16653 | 362 | .0148 | 0.00004088 |
| II-Dam | 16654 | 345 | .0264 | 0.00007652 |
| II-Dam | 16655 | 340 | .0223 | 0.00006559 |
| II-Dam | 16656 | 338 | .0212 | 0.00006272 |
| II-Dam | 16657 | 363 | .0202 | 0.00005565 |
| II-Dam | 16659 | 313 | .0192 | 0.00006134 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| III-Dam | 16662 | 280 | .0163 | 0.00005821 |
| III-Dam | 16664 | 331 | .0162 | 0.00004894 |
| III-Dam | 16665 | 314 | .0231 | 0.00007357 |
| III-Dam | 16666 | 310 | .0264 | 0.00008516 |
| III-Dam | 16667 | 323 | .0123 | 0.00003808 |
| III-Dam | 16668 | 339 | .0175 | 0.00005162 |
| III-Dam | 16669 | 357 | .0163 | 0.00004566 |
| III-Dam | 16670 | 312 | .0200 | 0.00006410 |
| III-Dam | 16673 | 340 | .0181 | 0.00005324 |
| III-Dam | 16675 | 346 | .0165 | 0.00004769 |
| III-Dam | 16676 | 369 | .0181 | 0.00004905 |
| III-Dam | 16678 | 332 | .0183 | 0.00005512 |
| III-Dam | 16679 | 341 | .0223 | 0.00006540 |
| III-Dam | 16680 | 331 | .0194 | 0.00005861 |
| III-Dam | 16681 | 333 | .0198 | 0.00005946 |
| III-Dam | 16683 | 336 | .0198 | 0.00005893 |
| IV-Dam | 16685 | 300 | .0257 | 0.00008567 |
| IV-Dam | 16686 | 391 | .0173 | 0.00004425 |
| IV-Dam | 16687 | 336 | .0177 | 0.00005268 |
| IV-Dam | 16688 | 329 | .0219 | 0.00006657 |
| IV-Dam | 16689 | 279 | .0142 | 0.00005090 |
| IV-Dam | 16690 | 360 | .0206 | 0.00005722 |
| IV-Dam | 16692 | 335 | .0185 | 0.00005522 |
| IV-Dam | 16693 | 353 | .0202 | 0.00005722 |
| IV-Dam | 16695 | 315 | .0215 | 0.00006825 |
| IV-Dam | 16696 | 348 | .0261 | 0.00007500 |
| IV-Dam | 16697 | 312 | .0147 | 0.00004712 |
| IV-Dam | 16698 | 329 | .0143 | 0.00004347 |
| IV-Dam | 16699 | 313 | .0201 | 0.00006422 |
| IV-Dam | 16701 | 317 | .0224 | 0.00007066 |
| IV-Dam | 16706 | 361 | .0210 | 0.00005817 |
| IV-Dam | 16707 | 314 | .0156 | 0.00004968 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| V-Dam | 16708 | 295 | .0274 | 0.00009288 |
| V-Dam | 16709 | 348 | .0327 | 0.00009397 |
| V-Dam | 16711 | 363 | .0328 | 0.00009036 |
| V-Dam | 16712 | 359 | .0311 | 0.00008663 |
| V-Dam | 16713 | 348 | .0284 | 0.00008161 |
| V-Dam | 16715 | 325 | .0298 | 0.00009169 |
| V-Dam | 16716 | 323 | .0293 | 0.00009071 |
| V-Dam | 16717 | 367 | .0297 | 0.00008093 |
| V-Dam | 16718 | 321 | .0267 | 0.00008318 |
| V-Dam | 16719 | 328 | .0302 | 0.00009207 |
| V-Dam | 16722 | 337 | .0345 | 0.00010237 |
| V-Dam | 16723 | 356 | .0252 | 0.00007079 |
| V-Dam | 16724 | 317 | .0321 | 0.00010126 |
| V-Dam | 16725 | 371 | .0250 | 0.00006739 |
| V-Dam | 16728 | 333 | .0358 | 0.00010751 |
| V-Dam | 16730 | 352 | .0304 | 0.00008636 |

[a]Duplicate tissues submitted. One set weighed .0243g, the second .0205g.
Excluded from statistical analysis
NA = Not Applicable

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| I-Dam | 16731 | 279 | .0188 | 0.00006738 |
| I-Dam | 16732 | 354 | .0192 | 0.00005424 |
| I-Dam | 16734 | 330 | .0235 | 0.00007121 |
| I-Dam | 16735 | 310 | .0198 | 0.00006387 |
| I-Dam | 16736 | 331 | .0253 | 0.00007644 |
| I-Dam | 16737 | 347 | .0260 | 0.00007493 |
| I-Dam | 16738 | 333 | .0211 | 0.00006336 |
| I-Dam | 16740 | 322 | .0196 | 0.00006087 |
| I-Dam | 16741 | 360 | .0227 | 0.00006306 |
| I-Dam | 16742 | 334 | .0195 | 0.00005838 |
| I-Dam | 16745 | 330 | .0212 | 0.00006424 |
| I-Dam | 16746 | 320 | .0159 | 0.00004969 |
| I-Dam | 16747 | 322 | .0263 | 0.00008168 |
| I-Dam | 16749 | 327 | .0213 | 0.00006514 |
| I-Dam | 16750 | 362 | .0189 | 0.00005221 |
| I-Dam | 16753 | 313 | .0192 | 0.00006134 |
| II-Dam | 16755 | 372 | .0204 | 0.00005484 |
| II-Dam | 16758 | 305 | .0171 | 0.00005607 |
| II-Dam | 16760 | 322 | .0186 | 0.00005776 |
| II-Dam | 16761 | 334 | .0189 | 0.00005659 |
| II-Dam | 16762 | 282 | .0222 | 0.00007872 |
| II-Dam | 16763 | 374 | .0253 | 0.00006765 |
| II-Dam | 16764 | 359 | .0221 | 0.00006156 |
| II-Dam | 16765 | 326 | .0191 | 0.00005859 |
| II-Dam | 16767 | 342 | .0219 | 0.00006404 |
| II-Dam | 16768 | 375 | .0266 | 0.00007093 |
| II-Dam | 16769 | 350 | .0265 | 0.00007571 |
| II-Dam | 16770 | 319 | .0189 | 0.00005925 |
| II-Dam | 16771 | 324 | .0199 | 0.00006142 |
| II-Dam | 16773 | 331 | .0180 | 0.00005438 |
| II-Dam | 16774 | 311 | .0179 | 0.00005756 |
| II-Dam | 16776 | 355 | .0200 | 0.00005634 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| III-Dam | 16781 | 309 | .0194 | 0.00006278 |
| III-Dam | 16782 | 355 | .0256 | 0.00007211 |
| III-Dam | 16783 | 330 | .0220 | 0.00006667 |
| III-Dam | 16784 | 337 | .0156 | 0.00004629 |
| III-Dam | 16786 | 333 | .0220 | 0.00006607 |
| III-Dam | 16787 | 357 | .0227 | 0.00006359 |
| III-Dam | 16791 | 311 | .0232 | 0.00007460 |
| III-Dam | 16792 | 295 | .0273 | 0.00009254 |
| III-Dam | 16793 | 307 | .0170 | 0.00005537 |
| III-Dam | 16794 | 330 | .0253 | 0.00007667 |
| III-Dam | 16795 | 343 | .0265 | 0.00007726 |
| III-Dam | 16796 | 332 | .0226 | 0.00006807 |
| III-Dam | 16797 | 328 | .0215 | 0.00006555 |
| III-Dam | 16798 | 340 | .0160 | 0.00004706 |
| III-Dam | 16799 | 350 | .0289 | 0.00008257 |
| IV-Dam | 16800 | 308 | .0156 | 0.00005065 |
| IV-Dam | 16801 | 385 | .0249 | 0.00006468 |
| IV-Dam | 16802 | 335 | .0198 | 0.00005910 |
| IV-Dam | 16803 | 316 | .0206 | 0.00006519 |
| IV-Dam | 16805 | 365 | .0261 | 0.00007151 |
| IV-Dam | 16806 | 321 | .0222 | 0.00006916 |
| IV-Dam | 16807 | 300 | .0182 | 0.00006067 |
| IV-Dam | 16808 | 323 | .0180 | 0.00005573 |
| IV-Dam | 16810 | 342 | .0178 | 0.00005205 |
| IV-Dam | 16811 | 304 | .0167 | 0.00005493 |
| IV-Dam | 16814 | 300 | .0164 | 0.00005467 |
| IV-Dam | 16815 | 336 | .0203 | 0.00006042 |
| IV-Dam | 16817 | 343 | .0279 | 0.00008134 |
| IV-Dam | 16818 | 292 | .0222 | 0.00007603 |
| IV-Dam | 16820 | 312 | .0186 | 0.00005962 |
| IV-Dam | 16822 | 331 | .0174 | 0.00005257 |
| V-Dam | 16823 | 281 | .0267 | 0.00009502 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**TERMINAL BODY WEIGHTS/THYROID WEIGHTS** (DAMS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Animal ID | Terminal Body Weight (Grams) | AbsoluteThyroid Weight (Grams) | Relative Thyroid Weight |
|---|---|---|---|---|
| V-Dam | 16825 | 336 | .0277 | 0.00008244 |
| V-Dam | 16826 | 354 | .0357 | 0.00010085 |
| V-Dam | 16827 | 297 | .0302 | 0.00010168 |
| V-Dam | 16828 | 354 | .0246 | 0.00006949 |
| V-Dam | 16830 | 328 | .0282 | 0.00008598 |
| V-Dam | 16831 | 361 | .0274 | 0.00007590 |
| V-Dam | 16833 | 324 | .0341 | 0.00010525 |
| V-Dam | 16834 | 324 | .0303 | 0.00009352 |
| V-Dam | 16836 | 352 | .0331 | 0.00009403 |
| V-Dam | 16837 | 352 | .0305 | 0.00008665 |
| V-Dam | 16839 | 328 | .0292 | 0.00008902 |
| V-Dam | 16840 | 336 | .0289 | 0.00008601 |
| V-Dam | 16842 | 312 | .0358 | 0.00011474 |
| V-Dam | 16843 | 326 | .0290 | 0.00008896 |
| V-Dam | 16844 | 372 | .0372 | 0.00010000 |

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PUPS

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

## STATISTICAL RESULTS OF THYROID WEIGHTS

### MALE PUPS
Project ID 1416-003 ABSOLUTE THYROID WEIGHTS

| Lactation Day 5 | | | Lactation Day 10 | | | Lactation Day 22 | | |
|---|---|---|---|---|---|---|---|---|
| Group | Thyroid Weight (g) | | Group | Thyroid Weight (g) | | Group | Thyroid Weight (g) | |
| 1 | X | .00149 | 1 | X | .00226 | 1 | X | .00716 |
| | SD | .000302 | | SD | .000696 | | SD | .001349 |
| | N | 16 | | N | 14 | | N | 16 |
| 2 | X | .00159 | 2 | X | .00291* | 2 | X | .00709 |
| | SD | .000344 | | SD | .000401 | | SD | .000803 |
| | N | 15 | | N | 16 | | N | 16 |
| 3 | X | .00167 | 3 | X | .00324** | 3 | X | .00591 |
| | SD | .000336 | | SD | .000647 | | SD | .001274 |
| | N | 16 | | N | 16 | | N | 15 |
| 4 | X | .00180 | 4 | X | .00343** | 4 | X | .00468* |
| | SD | .000560 | | SD | .000674 | | SD | .001671 |
| | N | 16 | | N | 16 | | N | 16 |
| 5 | X | .00214** | 5 | X | .00412** | 5 | X | .01103** |
| | SD | .000413 | | SD | .000802 | | SD | .001893 |
| | N | 16 | | N | 16 | | N | 16 |

### FEMALE PUPS
ABSOLUTE THYROID WEIGHTS

| Lactation Day 5 | | | Lactation Day 10 | | | Lactation Day 22 | | |
|---|---|---|---|---|---|---|---|---|
| Group | Thyroid Weight (g) | | Group | Thyroid Weight (g) | | Group | Thyroid Weight (g) | |
| 1 | X | .00133 | 1 | X | .00302 | 1 | X | .00605 |
| | SD | .000400 | | SD | .000789 | | SD | .001360 |
| | N | 16 | | N | 15 | | N | 16 |
| 2 | X | .00129 | 2 | X | .00296 | 2 | X | .00639 |
| | SD | .000359 | | SD | .000560 | | SD | .001218 |
| | N | 16 | | N | 15 | | N | 16 |
| 3 | X | .00145 | 3 | X | .00293 | 3 | X | .00661 |
| | SD | .000388 | | SD | .000547 | | SD | .001025 |
| | N | 16 | | N | 16 | | N | 15 |
| 4 | X | .00136 | 4 | X | .00305 | 4 | X | .00728* |
| | SD | .000434 | | SD | .000558 | | SD | .000961 |
| | N | 16 | | N | 15 | | N | 14 |
| 5 | X | .00142 | 5 | X | .00385** | 5 | X | .00876** |
| | SD | .000630 | | SD | .000516 | | SD | .001471 |
| | N | 16 | | N | 14 | | N | 16 |

* = p≤.05 ** = p≤.01

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | M | 16616-1 | .0010 |
| I-Pup | M | 16617-1 | .0014 |
| I-Pup | M | 16618-1 | .0011 |
| I-Pup | M | 16619-1 | .0018 |
| I-Pup | M | 16620-1 | .0017 |
| I-Pup | M | 16621-1 | .0014 |
| I-Pup | M | 16623-1 | .0020 |
| I-Pup | M | 16625-1 | .0015 |
| I-Pup | M | 16626-1 | .0015 |
| I-Pup | M | 16629-1 | .0016 |
| I-Pup | M | 16630-1 | .0015 |
| I-Pup | M | 16631-1 | .0014 |
| I-Pup | M | 16634-1 | .0014 |
| I-Pup | M | 16635-1 | .0021 |
| I-Pup | M | 16636-1 | .0014 |
| I-Pup | M | 16637-1 | .0011 |
| II-Pup | M | 16640-1 | .0014 |
| II-Pup | M | 16641-1 | .0020 |
| II-Pup | M | 16643-1 | .0017 |
| II-Pup | M | 16644-1 | .0020 |
| II-Pup | M | 16645-1 | .0012 |
| II-Pup | M | 16646-1 | .0013 |
| II-Pup | M | 16647-1 | .0016 |
| II-Pup | M | 16649-1 | .0013 |
| II-Pup | M | 16650-1 | .0020[a] |
| II-Pup | M | 16651-1 | .0019 |
| II-Pup | M | 16653-1 | .0020 |
| II-Pup | M | 16654-1 | .0017 |
| II-Pup | M | 16655-1 | .0015 |
| II-Pup | M | 16656-1 | .0016 |
| II-Pup | M | 16657-1 | .0008 |

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| II-Pup | M | 16659-1 | .0018 |
| III-Pup | M | 16662-1 | .0020 |
| III-Pup | M | 16664-1 | .0022 |
| III-Pup | M | 16665-1 | .0012 |
| III-Pup | M | 16666-1 | .0014 |
| III-Pup | M | 16667-1 | .0014 |
| III-Pup | M | 16668-1 | .0020 |
| III-Pup | M | 16669-1 | .0019 |
| III-Pup | M | 16670-1 | .0016 |
| III-Pup | M | 16673-1 | .0014 |
| III-Pup | M | 16675-1 | .0014 |
| III-Pup | M | 16676-1 | .0017 |
| III-Pup | M | 16678-1 | .0021 |
| III-Pup | M | 16679-1 | .0021 |
| III-Pup | M | 16680-1 | .0017 |
| III-Pup | M | 16681-1 | .0015 |
| III-Pup | M | 16683-1 | .0012 |
| IV-Pup | M | 16685-1 | .0026 |
| IV-Pup | M | 16686-1 | .0026 |
| IV-Pup | M | 16687-1 | .0019 |
| IV-Pup | M | 16688-1 | .0015 |
| IV-Pup | M | 16689-1 | .0012 |
| IV-Pup | M | 16690-1 | .0017 |
| IV-Pup | M | 16692-1 | .0013 |
| IV-Pup | M | 16693-1 | .0015 |
| IV-Pup | M | 16695-1 | .0017 |
| IV-Pup | M | 16696-1 | .0017 |
| IV-Pup | M | 16697-1 | .0018 |
| IV-Pup | M | 16698-1 | .0010 |
| IV-Pup | M | 16699-1 | .0021 |
| IV-Pup | M | 16701-1 | .0031 |
| IV-Pup | M | 16706-1 | .0017 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| IV-Pup | M | 16707-1 | .0014 |
| V-Pup | M | 16708-1 | .0014 |
| V-Pup | M | 16709-1 | .0020 |
| V-Pup | M | 16711-1 | .0019 |
| V-Pup | M | 16712-1 | .0019 |
| V-Pup | M | 16713-1 | .0018 |
| V-Pup | M | 16715-1 | .0028 |
| V-Pup | M | 16716-1 | .0023 |
| V-Pup | M | 16717-1 | .0022 |
| V-Pup | M | 16718-1 | .0020 |
| V-Pup | M | 16719-1 | .0021 |
| V-Pup | M | 16722-1 | .0020 |
| V-Pup | M | 16723-1 | .0022 |
| V-Pup | M | 16724-1 | .0031 |
| V-Pup | M | 16725-1 | .0018 |
| V-Pup | M | 16728-1 | .0022 |
| V-Pup | M | 16730-1 | .0026 |

[a]Excluded from statistical analyses - only one thyroid present.

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | F | 16616-2 | .0018 |
| I-Pup | F | 16617-2 | .0018 |
| I-Pup | F | 16618-2 | .0014 |
| I-Pup | F | 16619-2 | .0015 |
| I-Pup | F | 16620-2 | .0016 |
| I-Pup | F | 16621-2 | .0017 |
| I-Pup | F | 16623-2 | .0015 |
| I-Pup | F | 16625-2 | .0014 |
| I-Pup | F | 16626-2 | .0017 |
| I-Pup | F | 16629-2 | .0005 |
| I-Pup | F | 16630-2 | .0012 |
| I-Pup | F | 16631-2 | .0005 |
| I-Pup | F | 16634-2 | .0010 |
| I-Pup | F | 16635-2 | .0012 |
| I-Pup | F | 16636-2 | .0013 |
| I-Pup | F | 16637-2 | .0012 |
| II-Pup | F | 16640-2 | .0006 |
| II-Pup | F | 16641-2 | .0018 |
| II-Pup | F | 16643-2 | .0006 |
| II-Pup | F | 16644-2 | .0011 |
| II-Pup | F | 16645-2 | .0016 |
| II-Pup | F | 16646-2 | .0014 |
| II-Pup | F | 16647-2 | .0012 |
| II-Pup | F | 16649-2 | .0015 |
| II-Pup | F | 16650-2 | .0013 |
| II-Pup | F | 16651-2 | .0016 |
| II-Pup | F | 16653-2 | .0016 |
| II-Pup | F | 16654-2 | .0013 |
| II-Pup | F | 16655-2 | .0017 |
| II-Pup | F | 16656-2 | .0012 |
| II-Pup | F | 16657-2 | .0009 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| II-Pup | F | 16659-2 | .0013 |
| III-Pup | F | 16662-2 | .0016 |
| III-Pup | F | 16664-2 | .0013 |
| III-Pup | F | 16665-2 | .0015 |
| III-Pup | F | 16666-2 | .0015 |
| III-Pup | F | 16667-2 | .0012 |
| III-Pup | F | 16668-2 | .0018 |
| III-Pup | F | 16669-2 | .0011 |
| III-Pup | F | 16670-2 | .0005 |
| III-Pup | F | 16673-2 | .0012 |
| III-Pup | F | 16675-2 | .0014 |
| III-Pup | F | 16676-2 | .0014 |
| III-Pup | F | 16678-2 | .0017 |
| III-Pup | F | 16679-2 | .0021 |
| III-Pup | F | 16680-2 | .0021 |
| III-Pup | F | 16681-2 | .0013 |
| III-Pup | F | 16683-2 | .0015 |
| IV-Pup | F | 16685-2 | .0005 |
| IV-Pup | F | 16686-2 | .0011 |
| IV-Pup | F | 16687-2 | .0014 |
| IV-Pup | F | 16688-2 | .0008 |
| IV-Pup | F | 16689-2 | .0015 |
| IV-Pup | F | 16690-2 | .0014 |
| IV-Pup | F | 16692-2 | .0018 |
| IV-Pup | F | 16693-2 | .0017 |
| IV-Pup | F | 16695-2 | .0019 |
| IV-Pup | F | 16696-2 | .0018 |
| IV-Pup | F | 16697-2 | .0017 |
| IV-Pup | F | 16698-2 | .0013 |
| IV-Pup | F | 16699-2 | .0014 |
| IV-Pup | F | 16701-2 | .0005 |
| IV-Pup | F | 16706-2 | .0015 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 5 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL5 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| IV-Pup | F | 16707-2 | .0014 |
| V-Pup | F | 16708-2 | .0014 |
| V-Pup | F | 16709-2 | .0003 |
| V-Pup | F | 16711-2 | .0011 |
| V-Pup | F | 16712-2 | .0016 |
| V-Pup | F | 16713-2 | .0007 |
| V-Pup | F | 16715-2 | .0019 |
| V-Pup | F | 16716-2 | .0019 |
| V-Pup | F | 16717-2 | .0022 |
| V-Pup | F | 16718-2 | .0017 |
| V-Pup | F | 16719-2 | .0011 |
| V-Pup | F | 16722-2 | .0025 |
| V-Pup | F | 16723-2 | .0010 |
| V-Pup | F | 16724-2 | .0017 |
| V-Pup | F | 16725-2 | .0008 |
| V-Pup | F | 16728-2 | .0021 |
| V-Pup | F | 16730-2 | .0007 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | M | 16616-10-1 | .0016 |
| I-Pup | M | 16617-10-1 | .0017 |
| I-Pup | M | 16618-10-1 | .0014 |
| I-Pup | M | 16619-10-1 | .0022 |
| I-Pup | M | 16620-10-1 | .0016 |
| I-Pup | M | 16621-10-1 | .0015 |
| I-Pup | M | 16623-10-1 | .0030 |
| I-Pup | M | 16625-10-1 | .0028 |
| I-Pup | M | 16626-10-1 | .0031 |
| I-Pup | M | 16629-10-1 | .0030 |
| I-Pup | M | 16630-10-1 | .0031 |
| I-Pup | M | 16631-10-1 | .0027[a] |
| I-Pup | M | 16634-10-1 | .0033[b] |
| I-Pup | M | 16635-10-1 | .0015 |
| I-Pup | M | 16636-10-1 | .0029 |
| I-Pup | M | 16637-10-1 | .0022 |
| II-Pup | M | 16640-10-1 | .0029 |
| II-Pup | M | 16641-10-1 | .0032 |
| II-Pup | M | 16643-10-1 | .0027 |
| II-Pup | M | 16644-10-1 | .0028 |
| II-Pup | M | 16645-10-1 | .0030 |
| II-Pup | M | 16646-10-1 | .0033 |
| II-Pup | M | 16647-10-1 | .0033 |
| II-Pup | M | 16649-10-1 | .0033 |
| II-Pup | M | 16650-10-1 | .0034 |
| II-Pup | M | 16651-10-1 | .0030 |
| II-Pup | M | 16653-10-1 | .0027 |
| II-Pup | M | 16654-10-1 | .0021 |
| II-Pup | M | 16655-10-1 | .0033 |
| II-Pup | M | 16656-10-1 | .0028 |
| II-Pup | M | 16657-10-1 | .0027 |
| II-Pup | M | 16659-10-1 | .0021 |

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| III-Pup | M | 16662-10-1 | .0032 |
| III-Pup | M | 16664-10-1 | .0028 |
| III-Pup | M | 16665-10-1 | .0029 |
| III-Pup | M | 16666-10-1 | .0035 |
| III-Pup | M | 16667-10-1 | .0021 |
| III-Pup | M | 16668-10-1 | .0041 |
| III-Pup | M | 16669-10-1 | .0031 |
| III-Pup | M | 16670-10-1 | .0024 |
| III-Pup | M | 16673-10-1 | .0029 |
| III-Pup | M | 16675-10-1 | .0034 |
| III-Pup | M | 16676-10-1 | .0033 |
| III-Pup | M | 16678-10-1 | .0035 |
| III-Pup | M | 16679-10-1 | .0047 |
| III-Pup | M | 16680-10-1 | .0038 |
| III-Pup | M | 16681-10-1 | .0035 |
| III-Pup | M | 16683-10-1 | .0026 |
| IV-Pup | M | 16685-10-1 | .0033 |
| IV-Pup | M | 16686-10-1 | .0033 |
| IV-Pup | M | 16687-10-1 | .0038 |
| IV-Pup | M | 16688-10-1 | .0048 |
| IV-Pup | M | 16689-10-1 | .0029 |
| IV-Pup | M | 16690-10-1 | .0031 |
| IV-Pup | M | 16692-10-1 | .0027 |
| IV-Pup | M | 16693-10-1 | .0031 |
| IV-Pup | M | 16695-10-1 | .0038 |
| IV-Pup | M | 16696-10-1 | .0037 |
| IV-Pup | M | 16697-10-1 | .0041 |
| IV-Pup | M | 16698-10-1 | .0030 |
| IV-Pup | M | 16699-10-1 | .0041 |
| IV-Pup | M | 16701-10-1 | .0037 |
| IV-Pup | M | 16706-10-1 | .0036 |
| IV-Pup | M | 16707-10-1 | .0019 |

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| V-Pup | M | 16708-10-1 | .0033 |
| V-Pup | M | 16709-10-1 | .0045 |
| V-Pup | M | 16711-10-1 | .0036 |
| V-Pup | M | 16712-10-1 | .0047 |
| V-Pup | M | 16713-10-1 | .0036 |
| V-Pup | M | 16715-10-1 | .0044 |
| V-Pup | M | 16716-10-1 | .0027 |
| V-Pup | M | 16717-10-1 | .0050 |
| V-Pup | M | 16718-10-1 | .0042 |
| V-Pup | M | 16719-10-1 | .0041 |
| V-Pup | M | 16722-10-1 | .0050 |
| V-Pup | M | 16723-10-1 | .0045 |
| V-Pup | M | 16724-10-1 | .0032 |
| V-Pup | M | 16725-10-1 | .0035 |
| V-Pup | M | 16728-10-1 | .0038 |
| V-Pup | M | 16730-10-1 | .0058 |

[a]Excluded from statistical analyses - two weights recorded (Fragment weight .0014g)
[b]Excluded from statistical analyses - only one thyroid present.

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | F | 16616-10-2 | .0035 |
| I-Pup | F | 16617-10-2 | .0028 |
| I-Pup | F | 16618-10-2 | .0019 |
| I-Pup | F | 16619-10-2 | .0230[a] |
| I-Pup | F | 16620-10-2 | .0018 |
| I-Pup | F | 16621-10-2 | .0035 |
| I-Pup | F | 16623-10-2 | .0038 |
| I-Pup | F | 16625-10-2 | .0025 |
| I-Pup | F | 16626-10-2 | .0034 |
| I-Pup | F | 16629-10-2 | .0028 |
| I-Pup | F | 16630-10-2 | .0015 |
| I-Pup | F | 16631-10-2 | .0039 |
| I-Pup | F | 16634-10-2 | .0037 |
| I-Pup | F | 16635-10-2 | .0039 |
| I-Pup | F | 16636-10-2 | .0030 |
| I-Pup | F | 16637-10-2 | .0033 |
| II-Pup | F | 16640-10-2 | .0029 |
| II-Pup | F | 16641-10-2 | .0041[b] |
| II-Pup | F | 16643-10-2 | .0020 |
| II-Pup | F | 16644-10-2 | .0020 |
| II-Pup | F | 16645-10-2 | .0034 |
| II-Pup | F | 16646-10-2 | .0036 |
| II-Pup | F | 16647-10-2 | .0039 |
| II-Pup | F | 16649-10-2 | .0029 |
| II-Pup | F | 16650-10-2 | .0028 |
| II-Pup | F | 16651-10-2 | .0029 |
| II-Pup | F | 16653-10-2 | .0029 |
| II-Pup | F | 16654-10-2 | .0033 |
| II-Pup | F | 16655-10-2 | .0036 |
| II-Pup | F | 16656-10-2 | .0026 |
| II-Pup | F | 16657-10-2 | .0032 |
| II-Pup | F | 16659-10-2 | .0024 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| III-Pup | F | 16662-10-2 | .0033 |
| III-Pup | F | 16664-10-2 | .0029 |
| III-Pup | F | 16665-10-2 | .0030 |
| III-Pup | F | 16666-10-2 | .0032 |
| III-Pup | F | 16667-10-2 | .0032 |
| III-Pup | F | 16668-10-2 | .0032 |
| III-Pup | F | 16669-10-2 | .0027 |
| III-Pup | F | 16670-10-2 | .0022 |
| III-Pup | F | 16673-10-2 | .0031 |
| III-Pup | F | 16675-10-2 | .0032 |
| III-Pup | F | 16676-10-2 | .0016 |
| III-Pup | F | 16678-10-2 | .0034 |
| III-Pup | F | 16679-10-2 | .0040 |
| III-Pup | F | 16680-10-2 | .0028 |
| III-Pup | F | 16681-10-2 | .0025 |
| III-Pup | F | 16683-10-2 | .0026 |
| IV-Pup | F | 16685-10-2 | .0030 |
| IV-Pup | F | 16686-10-2 | .0034 |
| IV-Pup | F | 16687-10-2 | .0024 |
| IV-Pup | F | 16688-10-2 | .0030 |
| IV-Pup | F | 16689-10-2 | .0027 |
| IV-Pup | F | 16690-10-2 | .0026 |
| IV-Pup | F | 16692-10-2 | .0024 |
| IV-Pup | F | 16693-10-2 | .0037 |
| IV-Pup | F | 16695-10-2 | .0031 |
| IV-Pup | F | 16696-10-2 | .0028 |
| IV-Pup | F | 16697-10-2 | .0035 |
| IV-Pup | F | 16698-10-2 | .0024 |
| IV-Pup | F | 16699-10-2 | .0042 |
| IV-Pup | F | 16701-10-2 | .0038 |
| IV-Pup | F | 16706-10-2 | .0028 |
| IV-Pup | F | 16707-10-2 | .0017[c] |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 10 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL10 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| V-Pup | F | 16708-10-2 | .0036 |
| V-Pup | F | 16709-10-2 | .0045 |
| V-Pup | F | 16711-10-2 | .0028 |
| V-Pup | F | 16712-10-2 | .0025[b] |
| V-Pup | F | 16713-10-2 | .0038 |
| V-Pup | F | 16715-10-2 | .0045 |
| V-Pup | F | 16716-10-2 | .0029 |
| V-Pup | F | 16717-10-2 | .0044 |
| V-Pup | F | 16718-10-2 | .0039 |
| V-Pup | F | 16719-10-2 | Thyroids Missing |
| V-Pup | F | 16722-10-2 | .0040 |
| V-Pup | F | 16723-10-2 | .0038 |
| V-Pup | F | 16724-10-2 | .0042 |
| V-Pup | F | 16725-10-2 | .0039 |
| V-Pup | F | 16728-10-2 | .0040 |
| V-Pup | F | 16730-10-2 | .0036 |

[a]Excluded due to ten fold weight compared to others in group (probable weighing/recording error).
[b]Excluded from statistical analyses - only one thyroid present.
[c]Excluded from statistical analyses - pup found dead.

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | M | 16731-1 | .0051 |
| I-Pup | M | 16732-1 | .0073 |
| I-Pup | M | 16734-1 | .0090 |
| I-Pup | M | 16735-1 | .0069 |
| I-Pup | M | 16736-1 | .0058 |
| I-Pup | M | 16737-1 | .0083 |
| I-Pup | M | 16738-1 | .0092 |
| I-Pup | M | 16740-1 | .0056 |
| I-Pup | M | 16741-1 | .0060 |
| I-Pup | M | 16742-1 | .0087 |
| I-Pup | M | 16745-1 | .0085 |
| I-Pup | M | 16746-1 | .0051 |
| I-Pup | M | 16747-1 | .0073 |
| I-Pup | M | 16749-1 | .0071 |
| I-Pup | M | 16750-1 | .0072 |
| I-Pup | M | 16753-1 | .0074 |
| II-Pup | M | 16755-1 | .0072 |
| II-Pup | M | 16758-1 | .0076 |
| II-Pup | M | 16760-1 | .0079 |
| II-Pup | M | 16761-1 | .0071 |
| II-Pup | M | 16762-1 | .0058 |
| II-Pup | M | 16763-1 | .0067 |
| II-Pup | M | 16764-1 | .0078 |
| II-Pup | M | 16765-1 | .0065 |
| II-Pup | M | 16767-1 | .0073 |
| II-Pup | M | 16768-1 | .0072 |
| II-Pup | M | 16769-1 | .0080 |
| II-Pup | M | 16770-1 | .0081 |
| II-Pup | M | 16771-1 | .0074 |
| II-Pup | M | 16773-1 | .0069 |
| II-Pup | M | 16774-1 | .0051 |
| II-Pup | M | 16776-1 | .0068 |

EPL®

EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| III-Pup | M | 16781-1 | .0054 |
| III-Pup | M | 16782-1 | .0060 |
| III-Pup | M | 16783-1 | .0071 |
| III-Pup | M | 16784-1 | .0056 |
| III-Pup | M | 16786-1 | .0045 |
| III-Pup | M | 16787-1 | .0044 |
| III-Pup | M | 16791-1 | .0058 |
| III-Pup | M | 16792-1 | .0050 |
| III-Pup | M | 16793-1 | .0083 |
| III-Pup | M | 16794-1 | .0060 |
| III-Pup | M | 16795-1 | .0045 |
| III-Pup | M | 16796-1 | .0059 |
| III-Pup | M | 16797-1 | .0048 |
| III-Pup | M | 16798-1 | .0070 |
| III-Pup | M | 16799-1 | .0083 |
| IV-Pup | M | 16800-1 | .0043 |
| IV-Pup | M | 16801-1 | .0056 |
| IV-Pup | M | 16802-1 | .0067 |
| IV-Pup | M | 16803-1 | .0026 |
| IV-Pup | M | 16805-1 | .0069 |
| IV-Pup | M | 16806-1 | .0037 |
| IV-Pup | M | 16807-1 | .0069 |
| IV-Pup | M | 16808-1 | .0062 |
| IV-Pup | M | 16810-1 | .0067 |
| IV-Pup | M | 16811-1 | .0033 |
| IV-Pup | M | 16814-1 | .0018 |
| IV-Pup | M | 16815-1 | .0031 |
| IV-Pup | M | 16817-1 | .0049 |
| IV-Pup | M | 16818-1 | .0050 |
| IV-Pup | M | 16820-1 | .0038 |
| IV-Pup | M | 16822-1 | .0034 |
| V-Pup | M | 16823-1 | .0088 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (MALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| V-Pup | M | 16825-1 | .0100 |
| V-Pup | M | 16826-1 | .0120 |
| V-Pup | M | 16827-1 | .0094 |
| V-Pup | M | 16828-1 | .0121 |
| V-Pup | M | 16830-1 | .0139 |
| V-Pup | M | 16831-1 | .0113 |
| V-Pup | M | 16833-1 | .0097 |
| V-Pup | M | 16834-1 | .0102 |
| V-Pup | M | 16836-1 | .0102 |
| V-Pup | M | 16837-1 | .0107 |
| V-Pup | M | 16839-1 | .0083 |
| V-Pup | M | 16840-1 | .0122 |
| V-Pup | M | 16842-1 | .0139 |
| V-Pup | M | 16843-1 | .0093 |
| V-Pup | M | 16844-1 | .0144 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| I-Pup | F | 16731-2 | .0074 |
| I-Pup | F | 16732-2 | .0061 |
| I-Pup | F | 16734-2 | .0075 |
| I-Pup | F | 16735-2 | .0053 |
| I-Pup | F | 16736-2 | .0050 |
| I-Pup | F | 16737-2 | .0077 |
| I-Pup | F | 16738-2 | .0085 |
| I-Pup | F | 16740-2 | .0048 |
| I-Pup | F | 16741-2 | .0046 |
| I-Pup | F | 16742-2 | .0062 |
| I-Pup | F | 16745-2 | .0038 |
| I-Pup | F | 16746-2 | .0041 |
| I-Pup | F | 16747-2 | .0065 |
| I-Pup | F | 16749-2 | .0068 |
| I-Pup | F | 16750-2 | .0064 |
| I-Pup | F | 16753-2 | .0061 |
| II-Pup | F | 16755-2 | .0057 |
| II-Pup | F | 16758-2 | .0070 |
| II-Pup | F | 16760-2 | .0054 |
| II-Pup | F | 16761-2 | .0080 |
| II-Pup | F | 16762-2 | .0053 |
| II-Pup | F | 16763-2 | .0052 |
| II-Pup | F | 16764-2 | .0065 |
| II-Pup | F | 16765-2 | .0064 |
| II-Pup | F | 16767-2 | .0064 |
| II-Pup | F | 16768-2 | .0083 |
| II-Pup | F | 16769-2 | .0093 |
| II-Pup | F | 16770-2 | .0064 |
| II-Pup | F | 16771-2 | .0055 |
| II-Pup | F | 16773-2 | .0060 |
| II-Pup | F | 16774-2 | .0059 |
| II-Pup | F | 16776-2 | .0050 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| III-Pup | F | 16781-2 | .0053 |
| III-Pup | F | 16782-2 | .0070 |
| III-Pup | F | 16783-2 | .0069 |
| III-Pup | F | 16784-2 | .0085 |
| III-Pup | F | 16786-2 | .0058 |
| III-Pup | F | 16787-2 | .0053 |
| III-Pup | F | 16791-2 | .0072 |
| III-Pup | F | 16792-2 | .0058 |
| III-Pup | F | 16793-2 | .0078 |
| III-Pup | F | 16794-2 | .0071 |
| III-Pup | F | 16795-2 | .0074 |
| III-Pup | F | 16796-2 | .0077 |
| III-Pup | F | 16797-2 | .0053 |
| III-Pup | F | 16798-2 | .0061 |
| III-Pup | F | 16799-2 | .0060 |
| IV-Pup | F | 16800-2 | .0059 |
| IV-Pup | F | 16801-2 | .0077 |
| IV-Pup | F | 16802-2 | .0026[a] |
| IV-Pup | F | 16803-2 | .0068 |
| IV-Pup | F | 16805-2 | .0072 |
| IV-Pup | F | 16806-2 | .0085 |
| IV-Pup | F | 16807-2 | .0081 |
| IV-Pup | F | 16808-2 | .0066 |
| IV-Pup | F | 16810-2 | .0054 |
| IV-Pup | F | 16811-2 | .0074 |
| IV-Pup | F | 16814-2 | .0066 |
| IV-Pup | F | 16815-2 | .0082 |
| IV-Pup | F | 16817-2 | Thyroids Missing |
| IV-Pup | F | 16818-2 | .0070 |
| IV-Pup | F | 16820-2 | .0079 |
| IV-Pup | F | 16822-2 | .0086 |
| V-Pup | F | 16823-2 | .0078 |

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EXPERIMENTAL PATHOLOGY LABORATORIES, INC.

**THYROID WEIGHTS** (FEMALE PUPS)

Lactation Day 22 Sacrifice

Project ID 1416-003
EPL Project No. 601-004
DL22 Sacrifice

| Group | Sex | Animal ID | Thyroid Weight (Grams) |
|---|---|---|---|
| V-Pup | F | 16825-2 | .0086 |
| V-Pup | F | 16826-2 | .0096 |
| V-Pup | F | 16827-2 | .0063 |
| V-Pup | F | 16828-2 | .0078 |
| V-Pup | F | 16830-2 | .0097 |
| V-Pup | F | 16831-2 | .0097 |
| V-Pup | F | 16833-2 | .0091 |
| V-Pup | F | 16834-2 | .0088 |
| V-Pup | F | 16836-2 | .0100 |
| V-Pup | F | 16837-2 | .0065 |
| V-Pup | F | 16839-2 | .0061 |
| V-Pup | F | 16840-2 | .0099 |
| V-Pup | F | 16842-2 | .0111 |
| V-Pup | F | 16843-2 | .0097 |
| V-Pup | F | 16844-2 | .0095 |

[a]Excluded from statistical analyses - only one thyroid present.

# APPENDIX B

# STATISTICAL REPORT

PRIMEDICA CORPORATION ARGUS
PROTOCOL NUMBER 1416-003
EPL PROJECT NUMBER 601-004

HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK

STATISTICAL ANALYSIS OF DAM AND PUP THYROID WEIGHT DATA

## METHOD

Dam body weight, absolute thyroid weight, and thyroid/body weight ratio (absolute thyroid weight with respect to body weight), and pup thyroid weight were analyzed by analysis of variance techniques for several intervals. The statistical methods in the protocol for quantitative data for this study consisted of the following:

(1) Bartlett's test for variance homogeneity (1) - to be tested at $p \leq 0.001$ level.
(2) One-way Analysis of Variance (ANOVA) - Parametric (2) if Bartlett's test $p \geq 0.001$ or Nonparametric Kruskal-Wallis H-test (3) otherwise.
(3) Dunnett's control versus treatment comparison t-test (4-5) or Dunn's nonparametric multiple comparison z-test (6) if the ANOVA is significant at $p \leq 0.05$.

None of the parameters in this report showed significant variance heterogeneity by Bartlett's test at $p \leq 0.001$ level. As a result, no nonparametric analysis was necessary.

The results of the analyses are depicted in Text Tables 1-9 for the dams and 10-15 for the male and female pups.

## RESULTS

From Text Tables 1, 4, and 7, it is evident that there were no treatment-related significant body weight differences among the five groups in the dams. As Text Tables 2, 5, and 8 indicate, the absolute thyroid weights in the Group 5 dams were significantly increased over the control during those intervals. No other treatment groups exhibited this effect. Text Tables 3, 6, and 9 show the reflection of this absolute thyroid weight increase in relative terms (relative to body weight) in Group 5 dams.

Text Tables 10, 12, and 14 show the results of the male pup absolute thyroid weights. Based on the statistical results from these tables, the Group 5 male pups showed significant increases during Days 5, 10, and 22. Additionally, the male pups showed significant increases in absolute thyroid weight in Groups 2-4 on Day 10 and a significant decrease in Group 4 on Day 22.

Text Tables 11, 13, and 15 show the results of the female pup absolute thyroid weight. As these tables indicate, the female pups did not show any significant treatment effect in any of the groups on Day 5. On Day 10, there was a significant increase in Group 5 female pup mean absolute thyroid weight. On Day 22, the female pup absolute thyroid weight showed significant increases in both Groups 4 and 5 over control.

## CONCLUSION

In summary, treatment with the test material in this study did not exhibit any statistically significant effect on the dam body weights at different intervals. The absolute thyroid weights in Group 5 dams were significantly elevated in all intervals. The effect is both in terms of absolute and relative weights.

The male pups showed significant increases in absolute thyroid weights in one (Group 5 on Days 5 and 22) or all (Groups 2-5 on Day 10) groups. The female pups, on the other hand, showed significant increases in absolute thyroid

weight in Group 5 on Day 10 and Groups 4 and 5 on Day 22. The effect on the female pup absolute thyroid weight seems to be less pronounced than in the males.

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Principal Scientist and Biostatistician
Covance Laboratories, Inc.

11/08/2000
Date

References:

1. M.S. Bartlett, Some examples of statistical methods of research in agriculture and applied biology, J. Roy. Stat. Soc., Suppl. IV:137-183, 1937.

2. B.J. Winer, Statistical Principles in Experimental Design, McGraw-Hill, New York, 1971, 2nd. Ed.

3. M. Hollander and D.A. Wolfe, Nonparametric Statistical Methods, John Wiley, New York, 1973.

4. C.W. Dunnett, A multiple comparison procedure for comparing several treatments with a control, J. Am. Stat. Assoc., 50:1096-1121, 1955.

5. C.W. Dunnett, New tables for multiple comparisons with a control, Biometrics, 20:482-491.

6. O.J. Dunn, Multiple comparisons using rank sums, Technometrics, 6:241-252, 1964.

**Text Table 1: Individual Data and Statistical Results**
**Day10 Dams - Body Weight**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 327 | 365 | 280 | 300 | 295 |
| 343 | 309 | 331 | 391 | 348 |
| 397 | 315 | 314 | 336 | 363 |
| 342 | 366 | 310 | 329 | 359 |
| 326 | 351 | 323 | 279 | 348 |
| 314 | 324 | 339 | 360 | 325 |
| 362 | 330 | 357 | 335 | 323 |
| 345 | 375 | 312 | 353 | 367 |
| 365 | 329 | 340 | 315 | 321 |
| 339 | 312 | 346 | 348 | 328 |
| 353 | 362 | 369 | 312 | 337 |
| 356 | 345 | 332 | 329 | 356 |
| 324 | 340 | 341 | 313 | 317 |
| 350 | 338 | 331 | 317 | 371 |
| 336 | 363 | 333 | 361 | 333 |
| 319 | 313 | 336 | 314 | 352 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | 343.62500 | 20.761744 | 5.190436 | 342.50000 |
| 2 | 16 | 339.81250 | 22.006722 | 5.501681 | 339.00000 |
| 3 | 16 | 330.87500 | 20.616741 | 5.154185 | 332.50000 |
| 4 | 16 | 330.75000 | 27.389779 | 6.847445 | 329.00000 |
| 5 | 16 | 340.18750 | 21.195027 | 5.298757 | 342.50000 |

Bartlett's Test p-value = 0.7729
ANOVA p-value = 0.3673

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

Text Table 2: Individual Data and Statistical Results
Day10 Dams - Absolute Thyroid Weight

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0216 | 0.0198 | 0.0163 | 0.0257 | 0.0274 |
| 0.0146 | 0.0200 | 0.0162 | 0.0173 | 0.0327 |
| 0.0228 | 0.0142 | 0.0231 | 0.0177 | 0.0328 |
| 0.0202 | 0.0242 | 0.0264 | 0.0219 | 0.0311 |
| 0.0168 | 0.0227 | 0.0123 | 0.0142 | 0.0284 |
| 0.0170 | 0.0160 | 0.0175 | 0.0206 | 0.0298 |
| 0.0208 | 0.0251 | 0.0163 | 0.0185 | 0.0293 |
| 0.0218 | 0.0206 | 0.0200 | 0.0202 | 0.0297 |
| 0.0225 | 0.0156 | 0.0181 | 0.0215 | 0.0267 |
| 0.0181 | 0.0148 | 0.0165 | 0.0261 | 0.0302 |
| 0.0244 | 0.0264 | 0.0181 | 0.0147 | 0.0345 |
| 0.0168 | 0.0223 | 0.0183 | 0.0143 | 0.0252 |
| 0.0177 | 0.0212 | 0.0223 | 0.0201 | 0.0321 |
| 0.0195 | 0.0202 | 0.0194 | 0.0224 | 0.0250 |
| 0.0284 | 0.0192 | 0.0198 | 0.0210 | 0.0358 |
| 0.0254 | | 0.0198 | 0.0156 | 0.0304 |

TABLE OF BASIC STATISTICS

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .02053 | .003679 | .000920 | .02050 |
| 2 | 15 | .02015 | .003736 | .000965 | .02020 |
| 3 | 16 | .01878 | .003286 | .000822 | .01820 |
| 4 | 16 | .01949 | .003714 | .000929 | .02015 |
| 5 | 16 | .03007 | .003094 | .000774 | .03000 |

Bartlett's Test p-value = 0.9354
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9970 ↓
1 vs 3 p (2-sided) = 0.5031 ↓
1 vs 4 p (2-sided) = 0.8721 ↓
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 3: Individual Data and Statistical Results**
**Day10 Dams - Relative Thyroid/Body Weight**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.00006606 | 0.00005425 | 0.00005821 | 0.00008567 | 0.00009288 |
| 0.00004257 | 0.00006349 | 0.00004894 | 0.00004425 | 0.00009397 |
| 0.00005743 | 0.0000388 | 0.00007357 | 0.00005268 | 0.00009036 |
| 0.00005906 | 0.00006895 | 0.00008516 | 0.00006657 | 0.00008663 |
| 0.00005153 | 0.00007006 | 0.00003808 | 0.00005090 | 0.00008161 |
| 0.00005414 | 0.00004848 | 0.00005162 | 0.00005722 | 0.00009169 |
| 0.00005746 | 0.00006693 | 0.00004566 | 0.00005522 | 0.00009071 |
| 0.00006319 | 0.00006261 | 0.00006410 | 0.00005722 | 0.00008093 |
| 0.00006164 | 0.00005000 | 0.00005324 | 0.00006825 | 0.00008318 |
| 0.00005339 | 0.00004088 | 0.00004769 | 0.00007500 | 0.00009207 |
| 0.00006912 | 0.00007652 | 0.00004905 | 0.00004712 | 0.00010237 |
| 0.00004719 | 0.00006559 | 0.00005512 | 0.00004347 | 0.00007079 |
| 0.00005463 | 0.00006272 | 0.00006540 | 0.00006422 | 0.00010126 |
| 0.00005571 | 0.00005565 | 0.00005861 | 0.00007066 | 0.00006739 |
| 0.00008452 | 0.00006134 | 0.00005946 | 0.00005817 | 0.00010751 |
| 0.00007962 | | 0.00005893 | 0.00004968 | 0.00008636 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00006 | .000011 | .000003 | .00006 |
| 2 | 15 | .00006 | .000011 | .000003 | .00006 |
| 3 | 16 | .00006 | .000011 | .000003 | .00006 |
| 4 | 16 | .00006 | .000012 | .000003 | .00006 |
| 5 | 16 | .00009 | .000011 | .000003 | .00009 |

Bartlett's Test p-value = 0.9952
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9995 ↓
1 vs 3 p (2-sided) = 0.9265 ↓
1 vs 4 p (2-sided) = 0.9996 ↓
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

Text Table 4: Individual Data and Statistical Results
Day21 Dams - Body Weights

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 400 | 374 | 416 | 374 | 405 |
| 432 | 468 | 466 | 456 | 453 |
| 410 | 432 | 438 | 394 | 445 |
| 407 | 390 | 451 | 431 | 373 |
| 392 | 480 | 426 | 411 | 434 |
| 428 | 432 | 423 | 404 | 426 |
| 419 | 428 | 400 | 354 | 369 |
| 372 | 457 | 431 | 470 | 442 |
| 443 | 395 | 438 | 439 | 393 |
| 419 | 409 | 420 | 440 | 447 |
| 423 | 393 | 430 | 403 | 437 |
| 388 | 421 | 418 | 474 | 410 |
| 402 | 423 | 376 | 434 | 468 |
| 392 | 396 | 414 | 474 | 407 |
| 422 | 440 | 442 | 442 | 431 |
| 451 | 433 | 391 | 384 | 492 |

TABLE OF BASIC STATISTICS

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | 412.50000 | 21.137644 | 5.284411 | 414.50000 |
| 2 | 16 | 423.18750 | 29.561729 | 7.390432 | 425.50000 |
| 3 | 16 | 423.75000 | 22.335323 | 5.583831 | 424.50000 |
| 4 | 16 | 424.00000 | 36.518488 | 9.129622 | 432.50000 |
| 5 | 16 | 427.00000 | 32.970694 | 8.242674 | 432.50000 |

Bartlett's Test p-value = 0.1690
ANOVA p-value = 0.6756

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 5: Individual Data and Statistical Results**
**Day 21 Dams - Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0161 | 0.0210 | 0.0195 | 0.0228 | 0.0274 |
| 0.0196 | 0.0250 | 0.0217 | 0.0264 | 0.0320 |
| 0.0188 | 0.0173 | 0.0226 | 0.0205 | 0.0209 |
| 0.0188 | 0.0169 | 0.0205 | 0.0190 | 0.0237 |
| 0.0150 | 0.0175 | 0.0242 | 0.0226 | 0.0287 |
| 0.0184 | 0.0196 | 0.0208 | 0.0201 | 0.0290 |
| 0.0142 | 0.0176 | 0.0204 | 0.0172 | 0.0218 |
| 0.0224 | 0.0179 | 0.0269 | 0.0240 | 0.0253 |
| 0.0134 | 0.0153 | 0.0234 | 0.0273 | 0.0332 |
| 0.0159 | 0.0165 | 0.0185 | 0.0190 | 0.0225 |
| 0.0214 | 0.0199 | 0.0169 | 0.0245 | 0.0237 |
| 0.0238 | 0.0187 | 0.0199 | 0.0158 | 0.0242 |
| 0.0195 | 0.0164 | 0.0155 | 0.0264 | 0.0277 |
| 0.0198 | 0.0165 | 0.0173 | 0.0199 | 0.0234 |
| | 0.0264 | 0.0214 | 0.0169 | 0.0249 |
| | 0.0184 | 0.0181 | | 0.0320 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 14 | .01836 | .003099 | .000828 | .01880 |
| 2 | 16 | .01881 | .003071 | .000768 | .01775 |
| 3 | 16 | .02048 | .002934 | .000734 | .02045 |
| 4 | 15 | .02149 | .003684 | .000951 | .02050 |
| 5 | 16 | .02628 | .003847 | .000962 | .02510 |

Bartlett's Test p-value = 0.7907
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9936 ↑
1 vs 3 p (2-sided) = 0.3086 ↑
1 vs 4 p (2-sided) = 0.0550 ↑
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 6: Individual Data and Statistical Results**
**Day 21 Dams - Relative Thyroid/Body Weight**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.00004025 | 0.00005615 | 0.00004688 | 0.00006096 | 0.00006765 |
| 0.00004780 | 0.00005342 | 0.00004657 | 0.00005789 | 0.00007064 |
| 0.00004619 | 0.00004005 | 0.00005160 | 0.00005203 | 0.00004697 |
| 0.00004796 | 0.00004333 | 0.00004545 | 0.00004408 | 0.00006354 |
| 0.00003505 | 0.00003646 | 0.00005681 | 0.00005499 | 0.00006613 |
| 0.00004391 | 0.00004537 | 0.00004917 | 0.00004975 | 0.00006808 |
| 0.00003817 | 0.00004112 | 0.00005100 | 0.00004859 | 0.00005908 |
| 0.00005056 | 0.00003917 | 0.00006241 | 0.00005106 | 0.00005724 |
| 0.00003198 | 0.00003873 | 0.00005342 | 0.00006219 | 0.00008448 |
| 0.00003759 | 0.00004034 | 0.00004405 | 0.00004715 | 0.00005034 |
| 0.00005515 | 0.00005064 | 0.00003930 | 0.00005169 | 0.00005423 |
| 0.00006071 | 0.00004442 | 0.00004761 | 0.00003641 | 0.00005902 |
| 0.00004621 | 0.00003877 | 0.00004122 | 0.00005570 | 0.00005919 |
| 0.00004390 | 0.00004167 | 0.00004179 | 0.00004502 | 0.00005749 |
| | 0.00006000 | 0.00004842 | 0.00004401 | 0.00005777 |
| | 0.00004249 | 0.00004629 | | 0.00006504 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 14 | .00004 | .000008 | .000002 | .00005 |
| 2 | 16 | .00004 | .000007 | .000002 | .00004 |
| 3 | 16 | .00005 | .000006 | .000001 | .00005 |
| 4 | 15 | .00005 | .000007 | .000002 | .00005 |
| 5 | 16 | .00006 | .000009 | .000002 | .00006 |

Bartlett's Test p-value = 0.6143
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 1.0000 ↓
1 vs 3 p (2-sided) = 0.5607 ↑
1 vs 4 p (2-sided) = 0.1097 ↑
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 7: Individual Data and Statistical Results**
**Day 22 Dams - Body Weight**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 279 | 372 | 309 | 308 | 281 |
| 354 | 305 | 355 | 385 | 336 |
| 330 | 322 | 330 | 335 | 354 |
| 310 | 334 | 337 | 316 | 297 |
| 331 | 282 | 333 | 365 | 354 |
| 347 | 374 | 357 | 321 | 328 |
| 333 | 359 | 311 | 300 | 361 |
| 322 | 326 | 295 | 323 | 324 |
| 360 | 342 | 307 | 342 | 324 |
| 334 | 375 | 330 | 304 | 352 |
| 330 | 350 | 343 | 300 | 352 |
| 320 | 319 | 332 | 336 | 328 |
| 322 | 324 | 328 | 343 | 336 |
| 327 | 331 | 340 | 292 | 312 |
| 362 | 311 | 350 | 312 | 326 |
| 313 | 355 | | 331 | 372 |

TABLE OF BASIC STATISTICS

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | 329.62500 | 20.558453 | 5.139613 | 330.00000 |
| 2 | 16 | 336.31250 | 26.635112 | 6.658778 | 332.50000 |
| 3 | 15 | 330.46667 | 18.208580 | 4.701435 | 332.00000 |
| 4 | 16 | 325.81250 | 25.031230 | 6.257808 | 322.00000 |
| 5 | 16 | 333.56250 | 23.977681 | 5.994420 | 332.00000 |

Bartlett's Test p-value = 0.6294
ANOVA p-value = 0.7534

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 8: Individual Data and Statistical Results**
**Day 22 Dams - Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0188 | 0.0204 | 0.0194 | 0.0156 | 0.0267 |
| 0.0192 | 0.0171 | 0.0256 | 0.0249 | 0.0277 |
| 0.0235 | 0.0186 | 0.0220 | 0.0198 | 0.0357 |
| 0.0198 | 0.0189 | 0.0156 | 0.0206 | 0.0302 |
| 0.0253 | 0.0222 | 0.0220 | 0.0261 | 0.0246 |
| 0.0260 | 0.0253 | 0.0227 | 0.0222 | 0.0282 |
| 0.0211 | 0.0221 | 0.0232 | 0.0182 | 0.0274 |
| 0.0196 | 0.0191 | 0.0273 | 0.0180 | 0.0341 |
| 0.0227 | 0.0219 | 0.0170 | 0.0178 | 0.0303 |
| 0.0195 | 0.0266 | 0.0253 | 0.0167 | 0.0331 |
| 0.0212 | 0.0265 | 0.0265 | 0.0164 | 0.0305 |
| 0.0159 | 0.0189 | 0.0226 | 0.0203 | 0.0292 |
| 0.0263 | 0.0199 | 0.0215 | 0.0279 | 0.0289 |
| 0.0213 | 0.0180 | 0.0160 | 0.0222 | 0.0358 |
| 0.0189 | 0.0179 | 0.0289 | 0.0186 | 0.0290 |
| 0.0192 | 0.0200 | | 0.0174 | 0.0372 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .02114 | .002920 | .000730 | .02045 |
| 2 | 16 | .02084 | .003030 | .000758 | .01995 |
| 3 | 15 | .02237 | .004044 | .001044 | .02260 |
| 4 | 16 | .02017 | .003627 | .000907 | .01920 |
| 5 | 16 | .03054 | .003636 | .000909 | .02970 |

Bartlett's Test p-value = 0.7168
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9985 ↓
1 vs 3 p (2-sided) = 0.7908 ↑
1 vs 4 p (2-sided) = 0.8910 ↓
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

Text Table 9: Individual Data and Statistical Results
Day 22 Dams - Relative Thyroid/Body Weights

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.00006738 | 0.00005484 | 0.00006278 | 0.00005065 | 0.00009502 |
| 0.00005424 | 0.00005607 | 0.00007211 | 0.00006468 | 0.00008244 |
| 0.00007121 | 0.00005776 | 0.00006667 | 0.00005910 | 0.00010085 |
| 0.00006387 | 0.00005659 | 0.00004629 | 0.00006519 | 0.00010168 |
| 0.00007644 | 0.00007872 | 0.00006607 | 0.00007151 | 0.00006949 |
| 0.00007493 | 0.00006765 | 0.00006359 | 0.00006916 | 0.00008598 |
| 0.00006336 | 0.00006156 | 0.00007460 | 0.00006067 | 0.00007590 |
| 0.00006087 | 0.00005859 | 0.00009254 | 0.00005573 | 0.00010525 |
| 0.00006306 | 0.00006404 | 0.00005537 | 0.00005205 | 0.00009352 |
| 0.00005838 | 0.00007093 | 0.00007667 | 0.00005493 | 0.00009403 |
| 0.00006424 | 0.00007571 | 0.00007726 | 0.00005467 | 0.00008665 |
| 0.00004969 | 0.00005925 | 0.00006807 | 0.00006042 | 0.00008902 |
| 0.00008168 | 0.00006142 | 0.00006555 | 0.00008134 | 0.00008601 |
| 0.00006514 | 0.00005438 | 0.00004706 | 0.00007603 | 0.00011474 |
| 0.00005221 | 0.00005756 | 0.00008257 | 0.00005962 | 0.00008896 |
| 0.00006134 | 0.00005634 | | 0.00005257 | 0.00010000 |

TABLE OF BASIC STATISTICS

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00006 | .000009 | .000002 | .00006 |
| 2 | 16 | .00006 | .000008 | .000002 | .00006 |
| 3 | 15 | .00007 | .000012 | .000003 | .00007 |
| 4 | 16 | .00006 | .000009 | .000002 | .00006 |
| 5 | 16 | .00009 | .000011 | .000003 | .00009 |

Bartlett's Test p-value = 0.3095
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9433 ↓
1 vs 3 p (2-sided) = 0.7830 ↑
1 vs 4 p (2-sided) = 0.9254 ↓
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 10: Individual Data and Statistical Results**
**Day 5 Male Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0010 | 0.0014 | 0.0020 | 0.0026 | 0.0014 |
| 0.0014 | 0.0020 | 0.0022 | 0.0026 | 0.0020 |
| 0.0011 | 0.0017 | 0.0012 | 0.0019 | 0.0019 |
| 0.0018 | 0.0020 | 0.0014 | 0.0015 | 0.0019 |
| 0.0017 | 0.0012 | 0.0014 | 0.0012 | 0.0018 |
| 0.0014 | 0.0013 | 0.0020 | 0.0017 | 0.0028 |
| 0.0020 | 0.0016 | 0.0019 | 0.0013 | 0.0023 |
| 0.0015 | 0.0013 | 0.0016 | 0.0015 | 0.0022 |
| 0.0015 | 0.0019 | 0.0014 | 0.0017 | 0.0020 |
| 0.0016 | 0.0020 | 0.0014 | 0.0017 | 0.0021 |
| 0.0015 | 0.0017 | 0.0017 | 0.0018 | 0.0020 |
| 0.0014 | 0.0015 | 0.0021 | 0.0010 | 0.0022 |
| 0.0014 | 0.0016 | 0.0021 | 0.0021 | 0.0031 |
| 0.0021 | 0.0008 | 0.0017 | 0.0031 | 0.0018 |
| 0.0014 | 0.0018 | 0.0015 | 0.0017 | 0.0022 |
| 0.0011 | | 0.0012 | 0.0014 | 0.0026 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00149 | .000302 | .000076 | .00145 |
| 2 | 15 | .00159 | .000344 | .000089 | .00160 |
| 3 | 16 | .00167 | .000336 | .000084 | .00165 |
| 4 | 16 | .00180 | .000560 | .000140 | .00170 |
| 5 | 16 | .00214 | .000413 | .000103 | .00205 |

Bartlett's Test p-value = 0.1120
ANOVA p-value = 0.0002 **
1 vs 2 p (2-sided) = 0.9464 ↑
1 vs 3 p (2-sided) = 0.5984 ↑
1 vs 4 p (2-sided) = 0.1300 ↑
1 vs 5 p (2-sided) = 0.0001 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 11: Individual Data and Statistical Results**
**Day 5 Female Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0018 | 0.0006 | 0.0016 | 0.0005 | 0.0014 |
| 0.0018 | 0.0018 | 0.0013 | 0.0011 | 0.0003 |
| 0.0014 | 0.0006 | 0.0015 | 0.0014 | 0.0011 |
| 0.0015 | 0.0011 | 0.0015 | 0.0008 | 0.0016 |
| 0.0016 | 0.0016 | 0.0012 | 0.0015 | 0.0007 |
| 0.0017 | 0.0014 | 0.0018 | 0.0014 | 0.0019 |
| 0.0015 | 0.0012 | 0.0011 | 0.0018 | 0.0019 |
| 0.0014 | 0.0015 | 0.0005 | 0.0017 | 0.0022 |
| 0.0017 | 0.0013 | 0.0012 | 0.0019 | 0.0017 |
| 0.0005 | 0.0016 | 0.0014 | 0.0018 | 0.0011 |
| 0.0012 | 0.0016 | 0.0014 | 0.0017 | 0.0025 |
| 0.0005 | 0.0013 | 0.0017 | 0.0013 | 0.0010 |
| 0.0010 | 0.0017 | 0.0021 | 0.0014 | 0.0017 |
| 0.0012 | 0.0012 | 0.0021 | 0.0005 | 0.0008 |
| 0.0013 | 0.0009 | 0.0013 | 0.0015 | 0.0021 |
| 0.0012 | 0.0013 | 0.0015 | 0.0014 | 0.0007 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00133 | .000400 | .000100 | .00140 |
| 2 | 16 | .00129 | .000359 | .000090 | .00130 |
| 3 | 16 | .00145 | .000388 | .000097 | .00145 |
| 4 | 16 | .00136 | .000434 | .000108 | .00140 |
| 5 | 16 | .00142 | .000630 | .000157 | .00150 |

**Bartlett's Test p-value = 0.1666**
**ANOVA p-value = 0.8649**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 12: Individual Data and Statistical Results**
**Day 10 Male Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0016 | 0.0029 | 0.0032 | 0.0033 | 0.0033 |
| 0.0017 | 0.0032 | 0.0028 | 0.0033 | 0.0045 |
| 0.0014 | 0.0027 | 0.0029 | 0.0038 | 0.0036 |
| 0.0022 | 0.0028 | 0.0035 | 0.0048 | 0.0047 |
| 0.0016 | 0.0030 | 0.0021 | 0.0029 | 0.0036 |
| 0.0015 | 0.0033 | 0.0041 | 0.0031 | 0.0044 |
| 0.0030 | 0.0033 | 0.0031 | 0.0027 | 0.0027 |
| 0.0028 | 0.0033 | 0.0024 | 0.0031 | 0.0050 |
| 0.0031 | 0.0034 | 0.0029 | 0.0038 | 0.0042 |
| 0.0030 | 0.0030 | 0.0034 | 0.0037 | 0.0041 |
| 0.0031 | 0.0027 | 0.0033 | 0.0041 | 0.0050 |
| 0.0015 | 0.0021 | 0.0035 | 0.0030 | 0.0045 |
| 0.0029 | 0.0033 | 0.0047 | 0.0041 | 0.0032 |
| 0.0022 | 0.0028 | 0.0038 | 0.0037 | 0.0035 |
| | 0.0027 | 0.0035 | 0.0036 | 0.0038 |
| | 0.0021 | 0.0026 | 0.0019 | 0.0058 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 14 | .00226 | .000696 | .000186 | .00220 |
| 2 | 16 | .00291 | .000401 | .000100 | .00295 |
| 3 | 16 | .00324 | .000647 | .000162 | .00325 |
| 4 | 16 | .00343 | .000674 | .000169 | .00345 |
| 5 | 16 | .00412 | .000802 | .000200 | .00415 |

Bartlett's Test p-value = 0.1540
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.0313 ↑*
1 vs 3 p (2-sided) = 0.0005 ↑**
1 vs 4 p (2-sided) = 0.0000 ↑**
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 13: Individual Data and Statistical Results**
**Day 10 Female Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0035 | 0.0029 | 0.0033 | 0.0030 | 0.0036 |
| 0.0028 | 0.0020 | 0.0029 | 0.0034 | 0.0045 |
| 0.0019 | 0.0020 | 0.0030 | 0.0024 | 0.0028 |
| 0.0018 | 0.0034 | 0.0032 | 0.0030 | 0.0038 |
| 0.0035 | 0.0036 | 0.0032 | 0.0027 | 0.0045 |
| 0.0038 | 0.0039 | 0.0032 | 0.0026 | 0.0029 |
| 0.0025 | 0.0029 | 0.0027 | 0.0024 | 0.0044 |
| 0.0034 | 0.0028 | 0.0022 | 0.0037 | 0.0039 |
| 0.0028 | 0.0029 | 0.0031 | 0.0031 | 0.0040 |
| 0.0015 | 0.0029 | 0.0032 | 0.0028 | 0.0038 |
| 0.0039 | 0.0033 | 0.0016 | 0.0035 | 0.0042 |
| 0.0037 | 0.0036 | 0.0034 | 0.0024 | 0.0039 |
| 0.0039 | 0.0026 | 0.0040 | 0.0042 | 0.0040 |
| 0.0030 | 0.0032 | 0.0028 | 0.0038 | 0.0036 |
| 0.0033 | 0.0024 | 0.0025 | 0.0028 | |
| | | 0.0026 | | |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 15 | .00302 | .000789 | .000204 | .00330 |
| 2 | 15 | .00296 | .000560 | .000145 | .00290 |
| 3 | 16 | .00293 | .000547 | .000137 | .00305 |
| 4 | 15 | .00305 | .000558 | .000144 | .00300 |
| 5 | 14 | .00385 | .000516 | .000138 | .00390 |

Bartlett's Test p-value = 0.4785
ANOVA p-value = 0.0004 **
1 vs 2 z = 0.9978 ↓
1 vs 3 z = 0.9895 ↓
1 vs 4 z = 0.9998 ↑
1 vs 5 z = 0.0017 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 14: Individual Data and Statistical Results**
**Day 22 Male Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0051 | 0.0072 | 0.0054 | 0.0043 | 0.0088 |
| 0.0073 | 0.0076 | 0.0060 | 0.0056 | 0.0100 |
| 0.0090 | 0.0079 | 0.0071 | 0.0067 | 0.0120 |
| 0.0069 | 0.0071 | 0.0056 | 0.0026 | 0.0094 |
| 0.0058 | 0.0058 | 0.0045 | 0.0069 | 0.0121 |
| 0.0083 | 0.0067 | 0.0044 | 0.0037 | 0.0139 |
| 0.0092 | 0.0078 | 0.0058 | 0.0069 | 0.0113 |
| 0.0056 | 0.0065 | 0.0050 | 0.0062 | 0.0097 |
| 0.0060 | 0.0073 | 0.0083 | 0.0067 | 0.0102 |
| 0.0087 | 0.0072 | 0.0060 | 0.0033 | 0.0102 |
| 0.0085 | 0.0080 | 0.0045 | 0.0018 | 0.0107 |
| 0.0051 | 0.0081 | 0.0059 | 0.0031 | 0.0083 |
| 0.0073 | 0.0074 | 0.0048 | 0.0049 | 0.0122 |
| 0.0071 | 0.0069 | 0.0070 | 0.0050 | 0.0139 |
| 0.0072 | 0.0051 | 0.0083 | 0.0038 | 0.0093 |
| 0.0074 | 0.0068 | | 0.0034 | 0.0144 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00716 | .001349 | .000337 | .00725 |
| 2 | 16 | .00709 | .000803 | .000201 | .00720 |
| 3 | 15 | .00591 | .001274 | .000329 | .00580 |
| 4 | 16 | .00468 | .001671 | .000418 | .00460 |
| 5 | 16 | .01103 | .001893 | .000473 | .01045 |

Bartlett's Test p-value = 0.0284
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.9999 ↓
1 vs 3 p (2-sided) = 0.0730 ↓
1 vs 4 p (2-sided) = 0.0000 ↓**
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

**Text Table 15: Individual Data and Statistical Results**
**Day 22 Female Pups- Absolute Thyroid Weights**

| Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---|---|---|---|---|
| 0.0074 | 0.0057 | 0.0053 | 0.0059 | 0.0078 |
| 0.0061 | 0.0070 | 0.0070 | 0.0077 | 0.0086 |
| 0.0075 | 0.0054 | 0.0069 | 0.0068 | 0.0096 |
| 0.0053 | 0.0080 | 0.0085 | 0.0072 | 0.0063 |
| 0.0050 | 0.0053 | 0.0058 | 0.0085 | 0.0078 |
| 0.0077 | 0.0052 | 0.0053 | 0.0081 | 0.0097 |
| 0.0085 | 0.0065 | 0.0072 | 0.0066 | 0.0097 |
| 0.0048 | 0.0064 | 0.0058 | 0.0054 | 0.0091 |
| 0.0046 | 0.0064 | 0.0078 | 0.0074 | 0.0088 |
| 0.0062 | 0.0083 | 0.0071 | 0.0066 | 0.0100 |
| 0.0038 | 0.0093 | 0.0074 | 0.0082 | 0.0065 |
| 0.0041 | 0.0064 | 0.0077 | 0.0070 | 0.0061 |
| 0.0065 | 0.0055 | 0.0053 | 0.0079 | 0.0099 |
| 0.0068 | 0.0060 | 0.0061 | 0.0086 | 0.0111 |
| 0.0064 | 0.0059 | 0.0060 | | 0.0097 |
| 0.0061 | 0.0050 | | | 0.0095 |

**TABLE OF BASIC STATISTICS**

| GROUP NO. | SAMPLE SIZE | MEAN | SD | SEM | MEDIAN |
|---|---|---|---|---|---|
| 1 | 16 | .00605 | .001360 | .000340 | .00615 |
| 2 | 16 | .00639 | .001218 | .000305 | .00620 |
| 3 | 15 | .00661 | .001025 | .000265 | .00690 |
| 4 | 14 | .00728 | .000961 | .000257 | .00730 |
| 5 | 16 | .00876 | .001471 | .000368 | .00930 |

Bartlett's Test p-value = 0.4792
ANOVA p-value = 0.0000 **
1 vs 2 p (2-sided) = 0.8934 ↑
1 vs 3 p (2-sided) = 0.5995 ↑
1 vs 4 p (2-sided) = 0.0316 ↑*
1 vs 5 p (2-sided) = 0.0000 ↑**

* = p≤.05 ** = p≤.01
↓ = decrease ↑ = increase

# APPENDIX K

# THYROID AND PITUITARY HORMONE ANALYSIS

Part A - Gestation Day 21

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN PREGNANT AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING GESTATION OR VIA MATERNAL MILK
## PROTOCOL 1416-003
## GD21 – STUDY

## SERUM HORMONE (TSH, $T_3$, $T_4$) REPORT

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# SERUM HORMONE (TSH, $T_3$, $T_4$) REPORT
## GD21 – STUDY

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## Introduction

Ammonium perchlorate is an oxidizer that has been used as a component of solid rocket fuel (EPA, 1998). Perchlorate, the dissociated ion of ammonium perchlorate, has recently been recognized as a persistent and pervasive contaminant of water supplies in a number of major metropolitan areas (personal communication, D. Rogers). Current efforts at assessing the health risks of perchlorate ion have been hampered by a lack of relevant toxicity data and by a lack of understanding of the potential toxic mechanism of action (EPA, 1998). Perchlorate ion is known to disrupt thyroid hormone homeostasis in a number of species via an inhibition of iodine uptake into the thyroid gland (Wolff, 1998). Assessment of thyroid hormone ($T_3$ and $T_4$) and thyroid stimulating hormone (TSH) levels in circulating blood is the most sensitive endpoint for the effect of perchlorate ion on an organism (Capen, 1997). Caldwell *et al.* (1996) measured changes in $T_3$, $T_4$ and TSH hormone levels in male and female rats after 14 days of exposure to ammonium perchlorate in drinking water.

## Methods

**Compliance Statement:** The analyses in this report entitled "Serum Hormone (TSH,$T_3$,$T_4$) Report" were conducted in the spirit of the Environmental Protection Agency's Good Laboratory Practices Standards, 40 CFR 792.

**Sample Collection:** Serum samples from control and ammonium perchlorate treated female rats were received from Argus Research Lab, Inc. Serum samples were kept frozen at -80° C prior to analysis for serum thyroid hormones. The target doses were 0 (Carrier), 0.01, 0.1, 1.0, or 30.0 mg/kg-day.

**Hormone Analysis:** The following serum thyroid hormone levels were determined in control and ammonium perchlorate exposed rats on gestational day 21 (GD 21) according to the following priority: thyroid stimulating hormone (TSH), total thyroxine ($T_4$), triiodothyronine ($T_3$). Assays for $T_4$, $T_3$, and TSH were performed using radioimmunoassay (RIA) kits according to manufacturer's standard procedures. Samples and standards were run in triplicate. Assay kits from the same batch number and with the same expiration date were used for all thyroid hormone or TSH measurements in this study. $T_3$ RIA assay kits were purchased from Diagnostic Product Corp. (Los Angeles, CA) and canine $T_3$ antibody coated tubes were used. $T_4$ RIA assay kits were purchased from Diagnostic Product Corp. (Los Angeles, CA) and $T_4$ antibody coated tubes were used. TSH RIA assay kits were purchased from Amersham Corp. (Arlington Heights, IL) and lyophilized rabbit anti-rat TSH serum and Amerlex-M second antibody (donkey anti-rabbit serum coated onto magnetized polymer particles containing sodium azide) were both used. Tracer ($^{125}I^-$) radioactivity was measured with a gamma counter (Packard Instrument Co., Meriden, CT).

**Statistical Analysis:** Results were analyzed using a one-way analysis of variance with Bonferroni multiple comparisons (Rosner, 1990).

## RESULTS/DISCUSSION

Table 1 shows the results for TSH, $T_4$ and $T_3$ values in the blood of dams on GD 21. TSH values were significantly increased for all doses of ammonium perchlorate while $T_4$ values were significantly decreased for all doses. Values for $T_3$ were not significantly decreased until the 30 mg/kg-day dose. Changes for all hormones were in a dose dependent manner. Preliminary hormone data collected at AFRL/HEST in conjunction with kinetic studies is in close agreement with the data in this study. The only difference was the $T_3$ value at 1 mg/kg-day; this value was significantly decreased in the AFRL/HEST data but not in this study. Exposure of female rats before and during gestation is sufficient to decrease $T_4$ and trigger an increase in TSH at doses as low as 0.01 mg/kg-day.

Table 2 has the results for TSH, $T_4$ and $T_3$ values in the blood of fetuses on GD 21. TSH values were significantly increased at 1 and 30 mg/kg-day of ammonium perchlorate. The $T_4$ values were not significantly decreased until the 30 mg/kg-day dose of ammonium perchlorate. Values for $T_3$ were significantly decreased at all doses of ammonium perchlorate. Once again all changes for all hormones were in a dose dependent manner. Although preliminary hormone data collected at AFRL/HEST in conjunction with kinetic studies generally agreed with the data in this study, the dose at which statistical significance began was different for all three hormones. The number of samples for the kinetic study was only 4 because of the way litters were pooled to get sufficient blood for hormone analysis of fetal blood. Although $T_4$ was significantly decreased at all doses of ammonium perchlorate in the dams, $T_4$ was not decreased in the fetuses until the high dose of 30 mg/kg-day. A similar result was seen for TSH although the significant increase in TSH was seen at 1.0 mg/kg-day. This implies that there may be a compensatory or protective mechanism in the dam or kinetically fetuses may not be exposed at the same level.

## References

Caldwell DJ, Kinkead ER, Wolfe RE, King JH, Narayanan L, Confer PD, Mattie DR. (1996). Changes in thyroid hormone levels after fourteen day oral dosing with ammonium perchlorate. *The Toxicologist*, 30(1 part 2):67.

Capen, CC. (1997). Mechanistic data and risk assessment of selected toxic endpoints of the thyroid gland. *Toxicol. Pathol.*, 25(1):39-48.

EPA. (1998). Perchlorate environmental contamination: toxicological review and risk characterization based on emerging information. External review draft, December 31, 1998. National Center for Environmental Assessment, Washington, D.C. NCEA-1-0503.

Rosner, B. (1990). Fundamentals of Biostatistics, PWS-Kent, Boston.

Wolff, J. (1998). Perchlorate and the thyroid gland. *Pharmacol. Rev.*, 50:89-105.

Latha Narayanan 11/15/00
Latha Narayanan Date

David R. Mattie 11/15/00
David R. Mattie Date

## TABLE 1

## VALUES[a] OF SERUM THYROID HORMONES FOR PREGNANT FEMALE RATS AT GD21 FOLLOWING TREATMENT WITH AMMONIUM PERCHLORATE

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg-day) | Group III (0.1 mg/kg-day) | Group IV (1 mg/kg-day) | Group V (30 mg/kg-day) |
|---|---|---|---|---|---|
| TSH(ng/mL) | 6.05 ± 0.59 (16)[b] | 8.18[d] ± 0.78 (16) | 9.09[d] ± 0.84 (16) | 9.94[d] ± 0.98 (15) | 14.87[d] ± 1.48 (16) |
| $T_4$ (µg/dL) | 2.31 ± 0.13 (16) | 2.06[d] ± 0.23 (16) | 1.28[d] ± 0.13 (16) | 1.19[d] ± 0.12 (14) | 1.06[d] ± 0.11 (16) |
| $T_3$ (ng/dL) | 99.7 ± 6.0 (15) | 97.3 ± 9.7 (15) | 95.8 ± 6.3 (14) | 93.0 ± 9.0 (14) | 87.4[c] ± 8.5 (15) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.01$
[d]Significantly different from control, $p<0.001$

## TABLE 2

## VALUES[a] OF FETAL SERUM THYROID HORMONES AT GD21 FROM POOLED LITTERS FOR PREGNANT FEMALE RATS FOLLOWING TREATMENT WITH AMMONIUM PERCHLORATE

| Parameter | Group I (Carrier) | Group II (0.01 mg/kg-day) | Group III (0.1 mg/kg-day) | Group IV (1 mg/kg-day) | Group V (30 mg/kg-day) |
|---|---|---|---|---|---|
| TSH(ng/mL) | 7.22 ± 0.71 (16)[b] | 7.29 ± 0.64 (16) | 7.80 ± 0.83 (15) | 8.26[c] ± 0.73 (16) | 10.78[d] ± 1.08 (16) |
| $T_4$ (μg/dL) | 1.59 ± 0.16 (16) | 1.50 ± 0.14 (14) | 1.47 ± 0.16 (14) | 1.46 ± 0.13 (13) | 1.38[c] ± 0.12 (13) |
| $T_3$ (ng/dL) | 23.4 ± 2.3 (8) | 19.3[c] ± 2.2 (7) | 16.9[d] ± 1.8 (8) | 16.7[d] ± 1.7 (7) | 15.6[d] ± 1.1 (2) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.01$
[d]Significantly different from control, $p<0.001$





ARGUS 1416-003

Part B - Lactation Days 5 and 10

**DEPARTMENT OF THE AIR FORCE**
**AIR FORCE RESEARCH LABORATORY**
**WRIGHT-PATTERSON AIR FORCE BASE OHIO 45433**

30 June 2000

MEMORANDUM FOR US EPA
NCEA (MD-52)
RTP, NC 27711
ATTN: ANNIE M. JARABEK

FROM: Latha Narayanan
AFRL/HEST
Operational Toxicology Branch
2856 G St, Bldg 79
Wright-Patterson AFB, OH 45433-7400

SUBJECT: Consultative Letter, AFRL-HE-WP-CL-2000-0040, Serum Hormone (TSH, $T_3$, $T_4$) Report for Argus Protocol 1416-003B, PND10 and PND5 Studies

1. This letter report is being submitted in conjunction with the Argus Research Laboratories, Inc., report entitled: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B. Due to time constraints, these data could not be provided as an addendum to the aforementioned report and therefore are being presented separately.

2. The attached report contains serum hormone (thyroid stimulating hormone, thyroxine and triiodothyronine) results for postnatal day (PND) 10 maternal rats (dams) and PND5 and PND10 pups exposed to 0, 0.01, 0.1, 1.0 or 30.0 mg/kg-day ammonium perchlorate in the drinking water. Trends in hormone level changes over dose groups were similar to those seen in previous studies.

3. For further information, please contact me by phone: (937) 255-5150 ext. 3163, fax: (937) 255- 1474 or e-mail: latha.narayanan@wpafb.af.mil.

Latha Narayanan
LATHA NARAYANAN
Operational Toxicology Branch

Attachment: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B, PND10 and PND5 Studies, Serum Hormone (TSH, $T_3$, $T_4$) Report

1st Ind, AFRL/HEST 30 June 2000

MEMORANDUM FOR US EPA
ATTN: MS. ANNIE JARABEK

This letter report has been coordinated at the branch level and is approved for release.

David R. Mattie
DAVID R. MATTIE, Ph.D.
Acting Chief
Operational Toxicology Branch
Human Effectiveness Directorate

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN MATERNAL AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING POSTNATAL DAYS OR VIA MATERNAL MILK
## PROTOCOL 1416-003B
## PND10 and PND5 – STUDIES

## SERUM HORMONE (TSH, $T_3$, $T_4$) REPORT

SUBMITTED TO:
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SUBMITTED BY:
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GEO-CENTERS, INC
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**David Mattie, Ph.D., D.A.B.T.**

AFRL/HEST, Bldg 79
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## INTRODUCTION

Ammonium perchlorate is an oxidizer that has been used as a component of solid rocket fuel (EPA, 1998). Perchlorate, the dissociated ion of ammonium perchlorate, has recently been recognized as a persistent and pervasive contaminant of water supplies in a number of major metropolitan areas (personal communication, D. Rogers). Current efforts at assessing the health risks of perchlorate ion have been hampered by a lack of relevant toxicity data and by a lack of understanding of the potential toxic mechanism of action (EPA, 1998). Perchlorate ion is known to disrupt thyroid hormone homeostasis in a number of species via an inhibition of iodine uptake into the thyroid gland (Wolff, 1998). Assessment of thyroid hormone ($T_3$ and $T_4$) and thyroid stimulating hormone (TSH) levels in circulating blood is the most sensitive endpoint for the effect of perchlorate ion on an organism (Capen, 1997). Caldwell *et al.* (1996) measured changes in $T_3$, $T_4$ and TSH hormone levels in male and female rats after 14 days of exposure to ammonium perchlorate in drinking water.

## METHODS

### Compliance Statement

The analyses in this report entitled "Serum Hormone (TSH, $T_3$, $T_4$) Report" were conducted to be in the spirit of the Environmental Protection Agency's Good Laboratory Practices Standards, 40 CFR 792.

### Sample Collection

Serum samples from control and ammonium perchlorate treated female rats were received from Argus Research Laboratories, Inc. Serum samples were kept frozen at -80°C prior to analysis for serum thyroid hormones. The target doses were 0 (Carrier), 0.01, 0.1, 1.0, or 30.0 mg/kg-day. The number of samples per group varied due to the ability to collect sufficient blood from pups for all three hormone analyses.

### Hormone Analysis

The following serum thyroid hormone levels were determined in control and ammonium perchlorate exposed dams and their pups on postnatal day (PND) 10 and PND 5: total thyroxine ($T_4$), triiodothyronine ($T_3$) and thyroid stimulating hormone (TSH). Assays for $T_4$, $T_3$ and TSH were performed using radioimmunoassay (RIA) kits according to manufacturers' standard procedures. Samples and standards were run in triplicate. Assay kits from the same batch number and with the same expiration date were used for all thyroid hormone or TSH

measurements in this study. $T_3$ RIA assay kits were purchased from Diagnostic Product Corp. (Los Angeles, CA) and canine $T_3$ antibody coated tubes were used. $T_4$ RIA assay kits were also purchased from Diagnostic Product Corp. and $T_4$ antibody coated tubes were used. TSH RIA assay kits were purchased from Amersham Corp. (Arlington Heights, IL) and lyophilized rabbit anti-rat TSH serum and Amerlex-M second antibody (donkey anti-rabbit serum coated onto magnetized polymer particles containing sodium azide) were both used. Tracer ($^{125}I$) radioactivity was measured with a gamma counter (Packard Instrument Co., Meriden, CT).

### Statistical Analysis

Results were analyzed using a one-way analysis of variance with Bonferroni multiple comparisons (Rosner, 1990).

## RESULTS / DISCUSSION

TSH, $T_4$ and $T_3$ serum values for dams at PND10 are shown in Table 1. TSH values were significantly increased at all treatment levels; increases were in a dose-dependent manner. This same increase in TSH was also seen in pregnant rats at GD21 (York, 2000). Non-pregnant female rats had statistically elevated TSH after 14 days exposure to 0.05 mg/kg-day and higher that decreased to control levels in all but the high dose group (10 mg/kg-day) at 90 days (Siglin *et al.*, 2000). Based on TSH levels, pregnant and lactating rats appear to be more sensitive to ammonium perchlorate exposure. $T_4$ levels were decreased with increasing dose; these changes were significant only at the 30.0 mg/kg-day dose. This is not consistent with $T_4$ levels in pregnant and non-pregnant rats (Siglin *et al.*, 2000) where significant decreases occurred the 0.01 mg/kg-day dose and higher. Although $T_3$ levels also decreased in a dose-dependent manner, these changes were not statistically significant. This is similar to the pregnant rats at GD21 where only the high dose group was significantly decreased (York, 2000). However, in non-pregnant rats, $T_3$ was the same as lactating rats at 14 days of exposure but significantly decreased at 0.01 mg/kg-day and higher after 90-days of ammonium perchlorate exposure. The variability of $T_4$ and $T_3$ is difficult to explain.

Table 2 depicts TSH, $T_4$ and $T_3$ values for PND5 pups. The serum was pooled by litter. TSH values increased in a dose-dependent manner; these increases were not significantly different in treatment groups as compared to controls. $T_4$ and $T_3$ levels decreased with increasing dose; both hormones were significantly decreased in the 1.0 and 30.0 mg/kg-day groups. Differences in placental exposure versus lactational exposure need to be examined to explain the variability for these hormones between the GD21 (York, 2000) and PND5 time points.

Table 3 reports the results for TSH, $T_4$ and $T_3$ values in the pooled serum of PND10 pups. TSH values were increased significant only in the 30.0 mg/kg-day group. The $T_4$ values were not significantly decreased. $T_3$ values were significantly decreased at the 1.0 and 30.0 mg/kg-day dose levels. Again, all hormone changes were in a dose-dependent manner. Hormonal levels are

very similar between the PND5 and PND10 timepoints. At the lower doses, the thyroid appears to be compensating for ammonium perchlorate exposure except for the $T_3$ level at 1.0 mg/kg-day.

## REFERENCES

Caldwell DJ, Kinkead ER, Wolfe RE, King JH, Narayanan L, Confer PD, Mattie DR. (1996). Changes in thyroid hormone levels after fourteen day oral dosing with ammonium perchlorate. *The Toxicologist*, 30(1 part 2):67.

Capen, CC. (1997). Mechanistic data and risk assessment of selected toxic endpoints of the thyroid gland. *Toxicol. Pathol.*, 25(1):39-48.

EPA. (1998). Perchlorate environmental contamination: toxicological review and risk characterization based on emerging information. External review draft, December 31, 1998. National Center for Environmental Assessment, Washington, D.C. NCEA-1-0503.

Rosner, B. (1990). Fundamentals of Biostatistics, PWS-Kent, Boston.

Siglin, JC, Mattie, DR, Dodd, DE, Hildebrandt, PK, and Baker, WH. A 90-Day Drinking Water Toxicity Study in Rats of the Environmental Contaminant, Ammonium Perchlorate. *Toxicol. Sci.* (in press).

Wolff, J. (1998). Perchlorate and the thyroid gland. *Pharmacol. Rev.*, 50:89-105.

York, R.G. (2000). Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B. Argus Research Laboratories, Inc. Horsham, PA. Submitted to NCEA, EPA, June 2000.

Latha Narayanan 11/15/00

Latha Narayanan Date

David R. Mattie 11/15/00

David R. Mattie Date

## TABLE 1

### VALUES[a] OF SERUM THYROID HORMONES FOR MATERNAL FEMALE RATS (DAMS) AT PND10 FOLLOWING TREATMENT WITH AMMONIUM PERCHLORATE

| Parameter | Group 1 (Carrier) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 5.07 ± 0.54 (16)[b] | 6.33[d] ± 0.71 (16) | 6.52[e] ± 0.73 (16) | 6.90[e] ± 0.76 (16) | 11.61[e] ± 1.26 (16) |
| $T_4$ (μg/dL) | 4.03 ± 0.45 (16) | 3.76 ± 0.39 (16) | 3.75 ± 0.37 (16) | 3.70 ± 0.44 (16) | 3.59[c] ± 0.42 (16) |
| $T_3$ (ng/dL) | 99.9 ± 10.9 (16) | 98.2 ± 11.6 (16) | 98.0 ± 11.3 (16) | 97.7 ± 10.7 (16) | 92.0 ± 9.5 (16) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.05$
[d]Significantly different from control, $p<0.01$
[e]Significantly different from control, $p<0.001$



ARGUS 1416-003

## TABLE 2

## VALUES[a] OF SERUM THYROID HORMONES FROM POOLED LITTERS AT PND5 FOLLOWING MATERNAL TREATMENT WITH AMMONIUM PERCHLORATE

| Parameter | Group 1 (Carrier) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 4.86 ± 0.50 (16)[b] | 4.93 ± 0.58 (16) | 5.13 ± 0.54 (15) | 5.28 ± 0.60 (15) | 5.29 ± 0.62 (16) |
| $T_4$ (µg/dL) | 2.08 ± 0.24 (12) | 1.83 ± 0.21 (11) | 1.80 ± 0.18 (12) | 1.79[d] ± 0.21 (14) | 1.70[d] ± 0.20 (9) |
| $T_3$ (ng/dL) | 62.1 ± 6.6 (15) | 57.2 ± 6.4 (15) | 56.5 ± 5.2 (15) | 55.4[c] ± 5.5 (15) | 53.9[c] ± 6.1 (11) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.05$
[d]Significantly different from control, $p<0.01$



ARGUS 1416-003

## TABLE 3

## VALUES[a] OF SERUM THYROID HORMONES FROM POOLED LITTERS AT PND10 FOLLOWING MATERNAL TREATMENT WITH AMMONIUM PERCHLORATE

| Parameter | Group 1 (Carrier) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 6.64 ± 0.72 (16) | 7.22 ± 0.78 (16) | 7.25 ± 0.71 (16) | 7.33 ± 0.74 (16) | 8.88[c] ± 0.93 (16) |
| $T_4$ (µg/dL) | 3.73 ± 0.41 (16) | 3.73 ± 0.36 (16) | 3.50 ± 0.42 (16) | 3.37 ± 0.35 (16) | 3.35 ± 0.38 (16) |
| $T_3$ (ng/dL) | 79.5 ± 6.6 (16) | 75.2 ± 8.1 (16) | 74.4 ± 8.0 (16) | 66.2[c] ± 6.5 (16) | 64.4[c] ± 7.6 (16) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.001$



ARGUS 1416-003

Part C - Lactation Days 5 and 22

**DEPARTMENT OF THE AIR FORCE**
**AIR FORCE RESEARCH LABORATORY**
**WRIGHT-PATTERSON AIR FORCE BASE OHIO 45433**

7 Sept 2000

MEMORANDUM FOR US EPA
NCEA (MD-52)
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ATTN: ANNIE M. JARABEK

FROM: Latha Narayanan
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Operational Toxicology Branch
2856 G St, Bldg 79
Wright-Patterson AFB, OH 45433-7400

SUBJECT: Consultative Letter, AFRL-HE-WP-CL-2000-0042, Serum Hormone (TSH, $T_3$, $T_4$) Report for Argus Protocol 1416-003B, PND5 and PND22 Studies

1. This letter report is being submitted in conjunction with the Argus Research Laboratories, Inc., report entitled: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B. Due to time constraints, these data could not be provided as an addendum to the aforementioned report and therefore are being presented separately.

2. The attached report contains serum hormone (thyroid stimulating hormone, thyroxine and triiodothyronine) results for postnatal day (PND) 22 maternal rats (dams), PND5 culled pups and PND22 male and female pups. Dams were exposed to 0, 0.01, 0.1, 1.0 or 30.0 mg/kg-day ammonium perchlorate in the drinking water from two weeks prior to conception until PND22. Trends in hormone level changes over dose groups were similar to those seen in previous studies and will be discussed in greater detail in the attached report.

3. For further information, please contact me by phone: (937) 255-5150 ext. 3163, fax: (937) 255- 1474 or e-mail: latha.narayanan@wpafb.af.mil.

Latha Narayanan

LATHA NARAYANAN
Operational Toxicology Branch

Attachment: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B, PND5 and PND22 Studies, Serum Hormone (TSH, $T_3$, $T_4$) Report

1st Ind, AFRL/HEST 7 Sept 2000

MEMORANDUM FOR US EPA
ATTN: MS. ANNIE JARABEK

This letter report has been coordinated at the branch level and is approved for release.

David R. Mattie

DAVID R. MATTIE, Ph.D.
Acting Chief
Operational Toxicology Branch
Human Effectiveness Directorate

# HORMONE, THYROID AND NEUROHISTOLOGICAL EFFECTS OF ORAL (DRINKING WATER) EXPOSURE TO AMMONIUM PERCHLORATE IN MATERNAL AND LACTATING RATS AND IN FETUSES AND NURSING PUPS EXPOSED TO AMMONIUM PERCHLORATE DURING POSTNATAL DAYS OR VIA MATERNAL MILK
## PROTOCOL 1416-003B
## PND5 and PND22 – STUDIES

## SERUM HORMONE (TSH, $T_3$, $T_4$) REPORT

SUBMITTED TO:
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SUBMITTED BY:
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## INTRODUCTION

Ammonium perchlorate is an oxidizer that has been used as a component of solid rocket fuel (EPA, 1998). Perchlorate, the dissociated ion of ammonium perchlorate, has recently been recognized as a persistent and pervasive contaminant of water supplies in a number of major metropolitan areas (personal communication, D. Rogers). Current efforts at assessing the health risks of perchlorate ion have been hampered by a lack of relevant toxicity data and by a lack of understanding of the potential toxic mechanism of action (EPA, 1998). Perchlorate ion is known to disrupt thyroid hormone homeostasis in a number of species via an inhibition of iodine uptake into the thyroid gland (Wolff, 1998). Assessment of thyroid hormone (triiodothyronine ($T_3$) and thyroxine ($T_4$)) and thyroid stimulating hormone (TSH) levels in circulating blood is the most sensitive endpoint for the effect of perchlorate ion on an organism (Capen, 1997). Caldwell *et al.* (1996) was the first to measure changes in $T_3$, $T_4$ and TSH hormone levels in male and female rats after 14 days of exposure ammonium perchlorate in drinking water using a wide range of doses. Siglin *et al.* (2000) measured hormones in male and female rats after 14 and 90 days of exposure to ammonium perchlorate in drinking water.

## METHODS

### Compliance Statement

The analyses in this report entitled "Serum Hormone (TSH, $T_3$, $T_4$) Report" were conducted to be in the spirit of the Environmental Protection Agency's Good Laboratory Practices Standards, 40 CFR 792.

### Sample Collection

Serum samples from control and ammonium perchlorate treated female rats and pooled samples (by litter) from postnatal day (PND) 5 culled pups, female PND22 pups and male PND22 pups were received from Argus Lab, Inc. Serum samples were kept frozen at -80°C prior to analysis for serum thyroid hormones. The target doses were 0 (Control), 0.01, 0.1, 1.0, or 30.0 mg/kg-day. The number of samples per PND5 cull group varied due to the ability to collect sufficient blood from pups for all three hormone analyses.

### Hormone Analysis

The following serum thyroid hormone levels were determined in control and ammonium perchlorate exposed dams and pups on PND5 and PND 22 : total thyroxine ($T_4$), triiodothyronine ($T_3$) and thyroid stimulating hormone (TSH). Assays for $T_4$, $T_3$ and TSH were performed using

radioimmunoassay (RIA) kits according to manufacturers' standard procedures. Samples and standards were run in triplicate. Assay kits from the same batch number and with the same expiration date were used for all thyroid hormone or TSH measurements in this study. $T_3$ RIA assay kits were purchased from Diagnostic Product Corp. (Los Angeles, CA) and canine $T_3$ antibody coated tubes were used. $T_4$ RIA assay kits were also purchased from Diagnostic Product Corp. and $T_4$ antibody coated tubes were used. TSH RIA assay kits were purchased from Amersham Corp. (Arlington Heights, IL) and lyophilized rabbit anti-rat TSH serum and Amerlex-M second antibody (donkey anti-rabbit serum coated onto magnetized polymer particles containing sodium azide) were both used. Tracer ($^{125}I$) radioactivity was measured with a gamma counter (Packard Instrument Co., Meriden, CT).

### Statistical Analysis

One-way (dose group) analysis of variance was performed using TSH, $T_4$, and $T_3$ as dependent variables. For PND22, the dams, male pups and female pups were analyzed separately. Post-hoc paired comparisons of dose group used two-tailed t-tests with pooled error. The minimum significance level was $p<0.05$.

## RESULTS

Table 1 shows TSH, $T_4$ and $T_3$ results for pups culled at PND5. Serum was pooled by litter. Maternal ammonium perchlorate exposure resulted in dose-dependent increases in TSH levels and decreases in $T_4$ and $T_3$ levels. TSH was significantly increased at 1.0 and 30.0 mg/kg-day while $T_4$ decreases were significant at all dose levels as compared to controls. Decreases in $T_3$ levels were not statistically significant. Figures 1 and 2 depict PND5 results graphically as mean hormone levels and percent changes from control, respectively.

**TABLE 1. VALUES[a] OF SERUM THYROID HORMONES FROM CULLED PUPS POOLED BY LITTER AT PND5 FOLLOWING MATERNAL TREATMENT WITH AMMONIUM PERCHLORATE**

| Parameter | Group 1 (Control) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 5.71 ± 0.66 (15)[b] | 5.92 ± 0.68 (17) | 5.97 ± 0.53 (15) | 6.49[c] ± 0.66 (16) | 6.50[c] ± 0.68 (16) |
| $T_4$ (µg/dL) | 2.46 ± 0.27 (15) | 2.14[d] ± 0.24 (17) | 2.11[d] ± 0.23 (15) | 2.05[d] ± 0.22 (16) | 2.01[d] ± 0.22 (16) |
| $T_3$ (ng/dL) | 96.3 ± 10.6 (11) | 92.4 ± 9. 8 (16) | 91.7 ± 10.5 (9) | 90.8 ± 10.1 (12) | 89.5 ± 6.8 (13) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.01$
[d]Significantly different from control, $p<0.001$

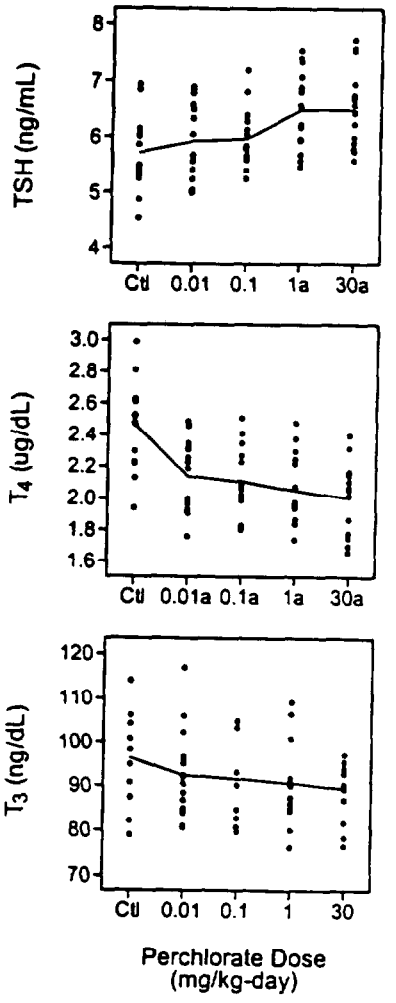


**Figure 1. Hormone level for culled pups pooled by litter at PND5. Line segments connect means from each dose group. Comparisons with control (a: p≤0.05) used 2-tailed t-tests with pooled error.**

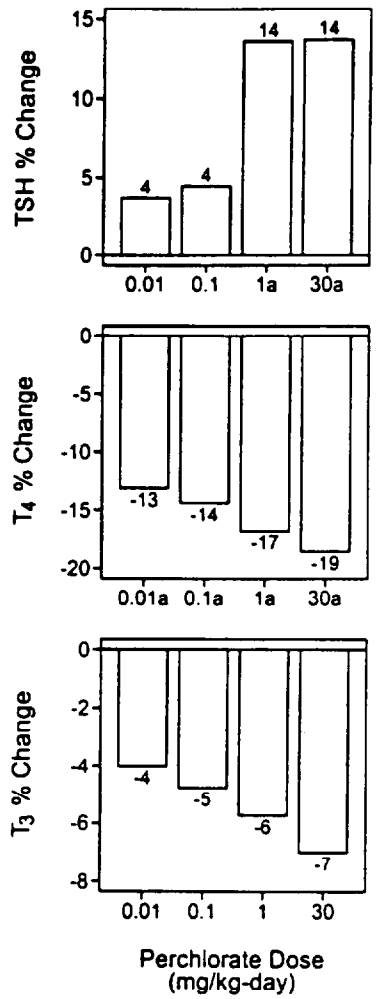


**Figure 2. Mean percent change from control at PND5. Comparisons with control (a: p≤0.05) used 2-tailed t-tests with pooled error. These comparisons were made using the data in Figure 1.**

TSH, $T_4$ and $T_3$ serum values for dams at PND22 are shown in Table 2. Again, all changes were dose dependent. Increases in TSH levels were significant starting at 0.1 mg/kg-day. $T_4$ decreases were significant only in the 30.0 mg/kg-day dose group. Although $T_3$ also decreased with increasing dose, these changes were not statistically significant. Mean maternal hormone levels are shown in Figure 3; Figure 4 presents the mean percent change in hormone levels as compared to control dam levels.

**TABLE 2. VALUES[a] OF SERUM THYROID HORMONES FOR MATERNAL RATS (DAMS) AT PND22 FOLLOWING TREATMENT WITH AMMONIUM PERCHLORATE**

| Parameter | Group 1 (Control) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 6.93 ± 0.73 (15)[b] | 7.39 ± 0.76 (17) | 8.11[d] ± 0.87 (15) | 8.15[d] ± 0.79 (16) | 10.11[d] ± 1.12 (16) |
| $T_4$ (µg/dL) | 3.52 ± 0.38 (15) | 3.51 ± 0.29 (17) | 3.47 ± 0.35 (15) | 3.29 ± 0.34 (16) | 3.14[c] ± 0.34 (16) |
| $T_3$ (ng/dL) | 120.3 ± 12.4 (15) | 119.9 ± 13.3 (17) | 117.6 ± 12.5 (15) | 115.7 ± 10.2 (16) | 112.6 ± 11.9 (16) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.01$
[d]Significantly different from control, $p<0.001$

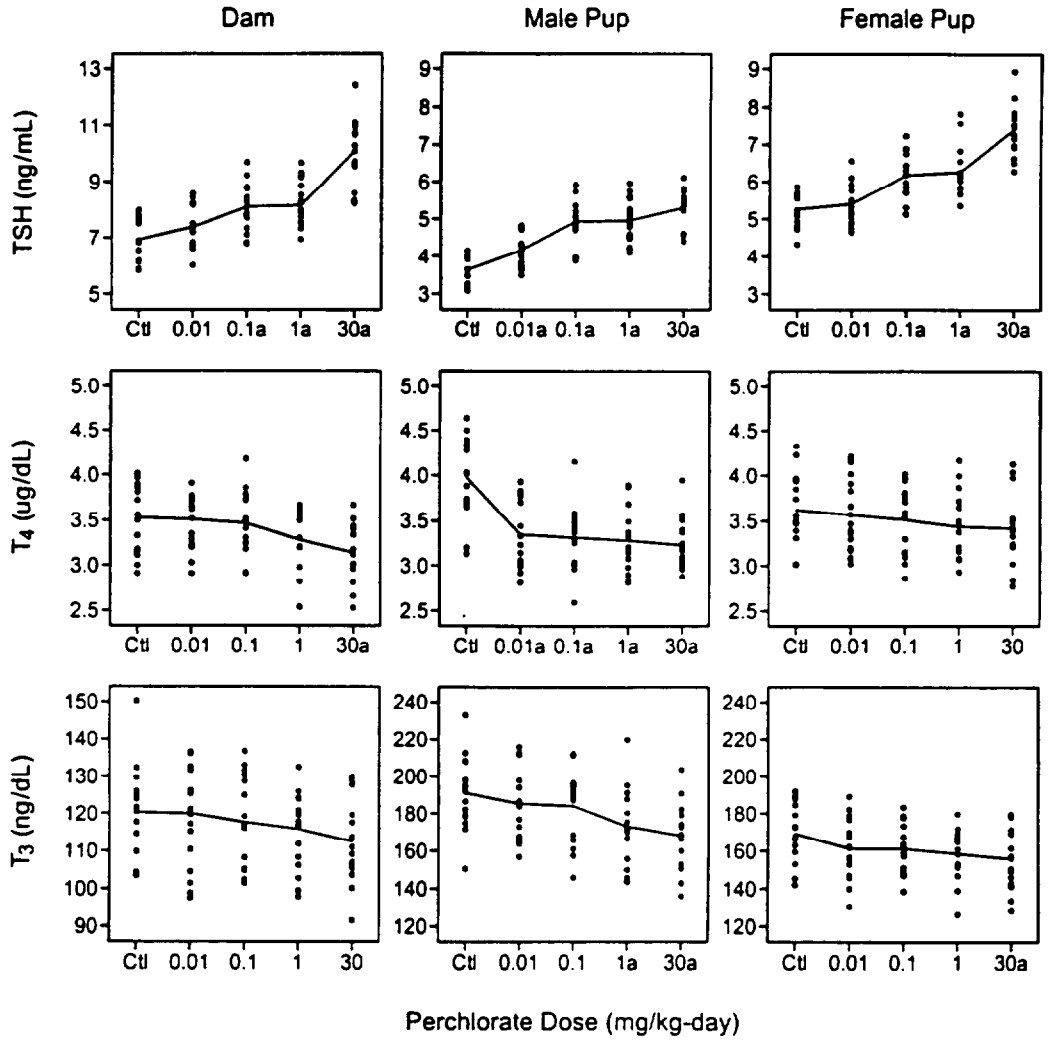


**Figure 3. Hormone level for each dam, male pup and female pup at PND22. Line segments connect means from each dose group. Comparisons with control (a: $p \leq 0.05$) used 2-tailed t-tests with pooled error.**

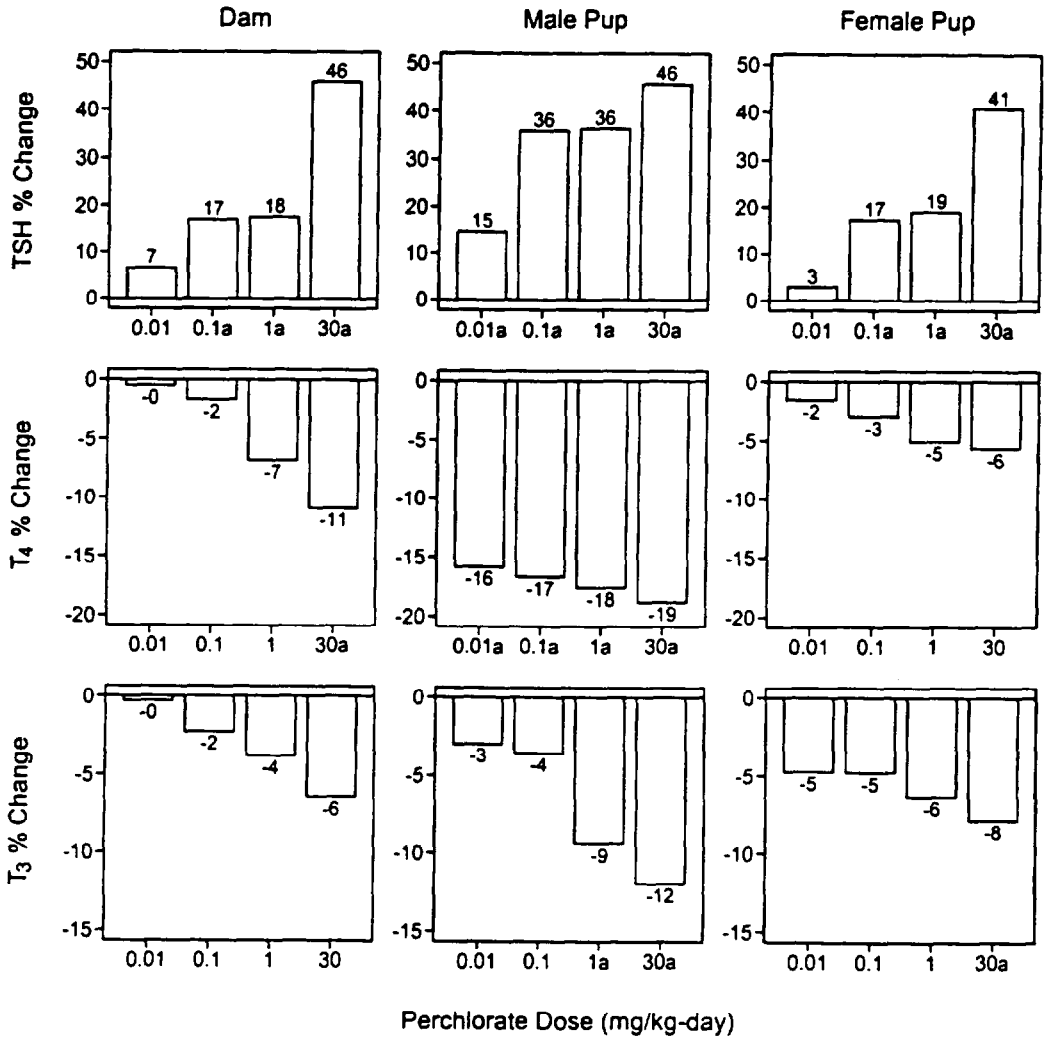


**Figure 4. Mean percent change from control at PND22. Comparisons with control (a: p≤0.05) used 2-tailed t-tests with pooled error. These comparisons were made using the data in Figure 3.**

Tables 3 and 4 report TSH, $T_4$ and $T_3$ values for male and female PND22 rat pups, respectively. In male pups, TSH increases and $T_4$ decreases were significant in all dose groups, as compared to controls. $T_3$ decreases became statistically significant at the two highest doses, 1.0 and 30.0 mg/kg-day. Female pups were less sensitive than male pups. TSH increased significantly in females at doses of 0.1 mg/kg-day and higher. $T_4$ decreases were not statistically significant at any dose while $T_3$ significantly decreased at the highest dose only. Figures 3 and 4 include mean hormone levels and mean percent change from control levels for both male and female pups.

**TABLE 3 VALUES[a] OF SERUM THYROID HORMONES FROM MALE PUPS AT PND22 FOLLOWING MATERNAL TREATMENT WITH AMMONIUM PERCHLORATE**

| Parameter | Group 1 (Control) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 3.63 ± 0.39 (15)[b] | 4.17[d] ± 0.42 (17) | 4.94[e] ± 0.54 (15) | 4.96[e] ± 0.58 (16) | 5.30[e] ± 0.52 (16) |
| $T_4$ (µg/dL) | 3.97 ± 0.46 (15) | 3.34[e] ± 0.38 (17) | 3.31[e] ± 0.36 (15) | 3.28[e] ± 0.34 (16) | 3.23[e] ± 0.28 (16) |
| $T_3$ (ng/dL) | 191.0 ± 20.0 (15) | 185.3 ± 20.3 (17) | 184.2 ± 19.8 (15) | 173.1[c] ± 19.7 (16) | 168.1[d] ± 17.2 (16) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.05$
[d]Significantly different from control, $p<0.01$
[e]Significantly different from control, $p<0.001$

**TABLE 4. VALUES[a] OF SERUM THYROID HORMONES FROM FEMALE PUPS AT PND22 FOLLOWING MATERNAL TREATMENT WITH AMMONIUM PERCHLORATE**

| Parameter | Group 1 (Control) | Group 2 (0.01 mg/kg-day) | Group 3 (0.1 mg/kg-day) | Group 4 (1.0 mg/kg-day) | Group 5 (30.0 mg/kg-day) |
|---|---|---|---|---|---|
| TSH (ng/mL) | 5.26 ± 0.47 (15)[b] | 5.41 ± 0.54 (17) | 6.17[d] ± 0.61 (15) | 6.26[d] ± 0.66 (16) | 7.40[d] ± 0.71 (16) |
| $T_4$ (µg/dL) | 3.62 ± 0.39 (15) | 3.57 ± 0.41 (17) | 3.51 ± 0.39 (15) | 3.44 ± 0.36 (16) | 3.41 ± 0.39 (16) |
| $T_3$ (ng/dL) | 169.3 ± 15.6 (15) | 161.3 ± 16.5 (17) | 161.2 ± 13.0 (15) | 158.6 ± 13.3 (16) | 156.0[c] ± 16.2 (16) |

[a]Mean ± SD
[b](N) = Number of values averaged
[c]Significantly different from control, $p<0.05$
[d]Significantly different from control, $p<0.001$

## DISCUSSION

Thyroid hormone analyses on pups culled at PND5 were conducted with two subsets of the York (2000) study corresponding to the PND10 and PND22 timepoints. Pup PND5 hormone levels from the PND22 subset are not identical to PND5 levels from the PND10 subset. In the PND10 subset, TSH levels at PND5 were not significantly increased (Narayanan, 2000) while in the current analysis, at PND5 TSH significantly increased in the 1.0 and 30.0 mg/kg-day groups ($p<0.01$). Both $T_3$ and $T_4$ decreased significantly at PND5 in the two highest dose groups in the PND10 subset (Narayanan, 2000) whereas $T_4$ was significantly decreased at all dose levels ($p<0.001$) and $T_3$ decreases were not significant ($p<0.05$) in the PND22 subset. The lack of agreement between hormone levels at PND5 may be linked to a sex difference between pooled culls from each litter. As the culls are not standardized, pooled cull samples will differ in sex ratio and number of pups contributing to the sample.

Maternal $T_3$ and $T_4$ levels compared well at PND22 with PND10 results. $T_4$ levels were significantly decreased only in the highest dose at both timepoints; $T_3$ was not significantly affected in either (Narayanan, 2000). In contrast, gestation day (GD) 21 pregnant rats (York, 2000) and non-pregnant rats had decreased $T_4$ levels starting in the lowest dose group (0.01 mg/kg-day) (Siglin *et al.*, 2000). $T_3$ levels in GD21 rats were similar to lactating rats as they significantly decreased only in the high dose group (York, 2000). However, in non-pregnant rats, $T_3$ was not decreased at 14 days of exposure but significantly decreased at 0.01 mg/kg-day and higher after 90 days (Siglin *et al.*, 2000).

Maternal TSH was elevated at all dose levels in the GD21 subset (York, 2000) and the PND10 subset (Narayanan, 2000); by PND22 the lowest dose, 0.01 mg/kg-day, was no longer statistically different from controls. Increased TSH at 14 days and apparent compensation by 90 days was seen in non-pregnant rats. After 14 days exposure to 0.05 mg/kg-day and higher, young female rats had increased TSH levels that decreased to control levels in all but the high dose group (10 mg/kg-day) at 90 days (Siglin *et al.*, 2000).

Male pups were more sensitive, with respect to hormone changes, than female pups at PND22 to ammonium perchlorate maternal (gestation and lactation) and drinking water combined exposure. Male pup TSH levels were significantly elevated at 0.01 mg/kg-day while female TSH increases became significant in the 0.1 mg/kg-day and higher dose groups. Dose-dependent decreases in $T_4$ levels in the female pups were not significant ($p<0.05$) while in male pups $T_4$ was decreased at all dose levels ($p<0.001$). Similarly, $T_3$ decreased significantly in male pups in the top two doses (1.0 and 30.0 mg/kg-day) while the decrease was significant in female pups only in the highest dose. Male rats appear to be more sensitive to perturbations in the thyroid-pituitary axis as compared to female rats (Capen, 1997).

PND22 pups, as a group, may be more sensitive than PND5 (from the PND10 or the PND22 subsets) and PND10 pups. TSH increases in PND22 pups occur in the lowest two doses while significant increases occur in the highest two doses, if at all, in the younger pup groups. TSH increased in the PND10 pups only at 30.0 mg/kg-day. $T_4$ was not significantly affected in the PND10 pups. Effects on $T_3$ were similar in the PND10 pups as compared to the PND22 pups; $T_3$

values were significantly decreased at the 1.0 and 30.0 mg/kg-day dose levels (Narayanan, 2000). Greater sensitivity in the PND22 pups as compared to the PND10 groups may be explained by direct exposure to ammonium perchlorate through consumption of drinking water as well as longer exposure (12 more days) in the older, weaning age pups.

## REFERENCES

Caldwell DJ, Kinkead ER, Wolfe RE, King JH, Narayanan L, Confer PD, Mattie DR. (1996). Changes in thyroid hormone levels after fourteen day oral dosing with ammonium perchlorate. *The Toxicologist*, 30(1 part 2):67.

Capen, CC. (1997). Mechanistic data and risk assessment of selected toxic endpoints of the thyroid gland. *Toxicol. Pathol.*, 25(1):39-48.

EPA. (1998). Perchlorate environmental contamination: toxicological review and risk characterization based on emerging information. External review draft, December 31, 1998. National Center for Environmental Assessment, Washington, D.C. NCEA-1-0503.

Narayanan, L. (2000). Consultative Letter, AFRL-HE-WP-CL-2000-0040, Serum Hormone (TSH, $T_3$, $T_4$) Report for Argus Protocol 1416-003B, PND10 and PND5 Studies. AFRL/HEST, Wright-Patterson AFB, OH.

Siglin, JC, Mattie, DR, Dodd, DE, Hildebrandt, PK, and Baker, WH. A 90-Day Drinking Water Toxicity Study in Rats of the Environmental Contaminant, Ammonium Perchlorate. *Toxicol. Sci.* (in press).

Wolff, J. (1998). Perchlorate and the thyroid gland. *Pharmacol. Rev.*, 50:89-105.

York, R.G. (2000). Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Maternal and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Postnatal Days or via Maternal Milk, Protocol 1416-003B. Argus Research Laboratories, Inc. Horsham, PA. Submitted to NCEA, EPA, June 2000.

Latha Narayanan 11/15/00
Latha Narayanan Date

David R. Mattie 11/15/00
David R. Mattie Date

# APPENDIX L

# NEUROHISTOLOGICAL REPORT

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# NEUROPATHOLOGY REPORT

## PROTOCOL 1416-003

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

**Neuropathology Report on $F_1$ Generation Day 10 Postpartum Rats**

TESTING FACILITY

**Argus Research Laboratories, Inc.**
**905 Sheehy Drive, Building A**
**Horsham, Pennsylvania 19044-1297**

STUDY SPONSOR

**Perchlorate Study Group**
**Highway 50 & Aerojet Road**
**Building 20019/Department 0330**
**Rancho Cordova, California 95670**

March 10, 2001

(82 Pages)

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

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## STATEMENT OF COMPLIANCE

Those portions of this study which were performed at the laboratories of Consultants in Veterinary Pathology, Inc. and at Experimental Pathology Laboratories, Inc. were conducted in compliance with the appropriate sections of the following Regulatory Citations:

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines.* OPPTS 870.3700: Prenatal developmental neurotoxicity study. August, 1998.

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines.* OPPTS 870.3800: Reproductive and fertility effects. August, 1998.

U.S. Environmental Protection Agency. Toxic Substances Control Act (TSCA); Good Laboratory Practice Standards; Final Rule. 40 CFR Part 792.

## PROTOCOL DEVIATION

In the pathology supplement to the Protocol for this study, it is stated that the brain images would be captured at a resolution of 2700 dpi. It was discovered, after scanning, that some of the images were captured, instead, at the scanner's default setting of 1350 dpi. This is not considered to have any impact on this study, because the sections can always be re-scanned later if resolution should prove to be sub-optimal for direct measuring of the digital images.

## NOTE ON STATISTICAL EVALUATIONS

Initial statistical evaluation of the morphometry data generated in this study consisted of a single factor ANOVA performed using an Excel® spreadsheet (results not included in this report). Subsequently, these data were analyzed at the Syracuse Research Corporation using Version 8 of SAS.® Verification of the statistical data was accomplished by: 1) comparing these data to the in-house results of the single factor ANOVA and 2) by comparing the hard copy print-outs from the Syracuse Research Corporation with those in the tables in this report. The statistical data could not otherwise be validated, because CVP, Inc. does not have the SAS software used by the Syracuse Research Corporation.

Robert H. Garman 3-10-01

Robert H. Garman, DVM Date
Consultants In Veterinary Pathology, Inc.

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

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## SUMMARY

$F_1$ generation rats had been exposed to the test substance *in utero* and potentially *via* lactation. The female parental rats had received the test substance in their drinking water beginning 14 days before cohabitation and continuing throughout gestation and lactation. The parental females had received sufficient concentrations of the test substance in their drinking water to achieve the following target dosages: Group I (0 mg/kg/day); Group II (0.01 mg/kg/day); Group III (0.1 mg/kg/day); Group IV (1.0 mg/kg/day); Group V (30.0 mg/kg/day). Multiple sections of brain were examined microscopically from day 10 postpartum $F_1$ generation rats, with between 14 and 16 rat brains being examined from each of the dose groups. In addition, twenty linear measurements (two gross and 18 microscopic) were taken from each brain.

There were no treatment-related neuropathologic alterations. As would be expected, the brains from the day 10 postpartum rats were characterized by active cellular migration and cell death (*i.e.* physiologic cell death or "apoptosis"), as well as by ventricular remodeling. However, no differences were found between the test substance–treated and control group rats in the degrees of cell death or in the overall pattern of brain morphology.

The mean values for the linear dimensions of a number of brain regions for both male and female rats were found to be either significantly greater or lesser in certain test substance-treated rat groups in comparison to the comparable control group values. For the male rats, the test substance appeared to have a trophic effect, with a number of brain regions in certain test substance-treated groups being of significantly greater dimension in comparison to control group values. Even so, there was no evidence of any obvious treatment-related effects on male rat brain weights. Statistically significant differences were found for some brain structures in all male treatment groups excepting for Group II, suggesting that 0.01 mg/kg/day may be a no-effect level for the male rat. A total of 12 mean measurements were significantly increased in some test substance-treated male rat groups *vs.* male control group values. Two were increased in Group III, 9 in Group IV, and one in Group V. The reason for the apparent enhanced effect in Group IV is not known. The most consistent treatment-related effect in the male rats was on the thickness of the corpus callosum, with both the right and left-sided measures of the thickness of this white matter tract being significantly greater (*vs.* control group values) for the male rats in Groups III and IV.

While certain neuroanatomic structures were of greater dimension in treated male rats in comparison to control group values, a bimorphic sex-related pattern was evident in this study. For the female rats, numerous brain regions were slightly attenuated in comparison to female control group values. However, there was no evidence of dose-related enhancement for these differences. For the CA1

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

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There were no treatment-related neuropathologic alterations. As would be expected, the brains from the day 10 postpartum rats were characterized by active cellular migration and cell death (*i.e.* physiologic cell death or "apoptosis"), as well as by ventricular remodeling. However, no differences were found between the test substance–treated and control group rats in the degrees of cell death or in the overall pattern of brain morphology.

The mean values for the linear dimensions of a number of brain regions for both male and female rats were found to be either significantly greater or lesser in certain test substance-treated rat groups in comparison to the comparable control group values. For the male rats, the test substance appeared to have a trophic effect, with a number of brain regions in certain test substance-treated groups being of significantly greater dimension in comparison to control group values. Even so, there was no evidence of any obvious treatment-related effects on male rat brain weights. Statistically significant differences were found for some brain structures in all male treatment groups excepting for Group II, suggesting that 0.01 mg/kg/day may be a no-effect level for the male rat. A total of 11 mean measurements were significantly increased in some test substance-treated male rat groups *vs.* male control group values. Two were increased in Group III, 8 in Group IV, and one in Group V. The reason for the apparent enhanced effect in Group IV is not known. The most consistent treatment-related effect in the male rats was on the thickness of the corpus callosum, with both the right and left-sided measures of the thickness of this white matter tract being significantly greater (*vs.* control group values) for the male rats in Groups III and IV.

While certain neuroanatomic structures were of greater dimension in treated male rats in comparison to control group values, a bimorphic sex-related pattern was evident in this study. For the female rats, numerous brain regions were slightly attenuated in comparison to female control group values. However, there was no evidence of dose-related enhancement for these differences. For the CA1

region of the hippocampus, significant differences from control group values were noted for both the Group III and IV females. The lack of any dose-enhancing effects in the females suggests the possibility that the control group values in this study may not have been representative. Although the mean thicknesses of the external germinal (granular) layer of the cerebellum were significantly thinner for the Group II and III females in comparison to the female control group, this layer is highly variable in thickness and, therefore, difficult to assess accurately with only six linear measurements. The inter-group differences in thickness of the external granular layer are, therefore, considered to be of no biologic significance. Based on the variable nature of the female data, it is not clear that any definite treatment effects are present in the female rats on this study, even though these data do suggest the possibility of a test substance-associated delay in brain maturation. Further in-depth data interpretation may require the taking of additional morphometric measurements such as areas rather than linear measures.

## INTRODUCTION

The purpose of the neuropathology component of this study was to provide additional neuro-histologic morphometric data that could potentially be correlated with thyroid hormone data and histologic thyroid changes present within the same experimental population. The female parental rats had received the test substance in their drinking water beginning 14 days before cohabitation and continuing throughout gestation and lactation. The in-life portion of the study had been conducted at Argus Research Laboratories, Inc. The brains from the postpartum day 10 rats were trimmed and processed at Consultants in Veterinary Pathology, Inc. The brains from the postpartum day 22 rats were trimmed and processed at Experimental Pathology Laboratories, Inc. This report presents the methodologies and the results of the evaluations performed on the postpartum day 10 rats.

## MATERIALS AND METHODS

### Animals and Study Overview

Crl:CD®(SD)IGS BR VAF/Plus® rats originating from Charles River Laboratories, Inc. were used for this study. The parental generation female rats had continual access to the test substance in the drinking water beginning 14 days before cohabitation and continuing through the day before sacrifice. There were five dosage groups, with these groups having the following target dosages: 0, 0.01, 0.1, 1.0, and 30.0 mg/kg/day. Necropsies were performed on rats at four age points, these being gestational age 21 and postpartum days 5, 10, and 22. This report presents the findings for the postpartum day 10 rats.

### Dissection and Weighing of Brains

The $F_1$ generation pups selected for evaluation at day 10 postpartum had been sacrificed by carbon dioxide asphyxiation. The heads of each of the pups selected for neuro-histologic evaluation had been severed just behind the back of the skull. The calvaria had then been removed from the top of each

skull and the entire heads immersed in 10% neutral buffered formalin. These heads were subsequently received at Consultants In Veterinary Pathology, Inc. where the brains were removed and weighed. Sixteen brains were to have been examined from each of the maternal control and high dose groups. However, due to necropsy damage, only 14 or 15 brains are present in some groups.

Prior to slicing the brains for histologic processing, a Vernier caliper was used to obtain two anterior to posterior linear measurements from each brain as follows:

1) Anterior to posterior (AP) length of the cerebrum, extending from the anterior pole to the posterior pole, exclusive of the olfactory bulbs.
2) Anterior to posterior (AP) length of the cerebellum, extending from the anterior edge of the cerebellar cortex to the posterior pole (posterior edge of the cerebellar uvula). This measurement was made on a diagonal.

These gross measurements were performed in a "blinded" manner, with the individual performing the measurements being unaware of the dose group assignments.

After the gross measurements were taken, the day 10 postpartum rat pup brains were divided into six coronal sections as listed below.

Cut #1 - Half-way between the ventral base of the olfactory bulbs and the optic chiasm.
Cut #2 - Just anterior to the optic chiasm.
Cut #3 - Just anterior to the infundibulum.
Cut #4 - Through the midbrain at the level of the mammillary body.
Cut #5 - Through the cerebellum just anterior to its midpoint.
Cut #6 - Through the anterior portion of the medulla.

Cut #1 through Cut #4 were made from the ventral aspect of the brain, while Cuts #5 and #6 were made from the dorsal aspect of the brain. The olfactory bulbs were also processed, resulting in approximately eight slices from each brain. For all sections other than for the olfactory bulbs, the anterior face of each section was placed down into the tissue cassette (thus representing the face that was subsequently sectioned with the microtome). Each brain slice was approximately 2 mm in thickness.

The slice containing the optic chiasm was placed into Cassette No. 1. The slice which included the infundibulum was placed into Cassette No. 2. The slice through the mammillary body was placed in Cassette No. 3. The slice through the middle of the cerebellum was placed into Cassette No. 4. All of the remaining pieces of brain were placed into Cassette No. 5.

Histotechnology Procedures

The brain sections were processed according to the Standard Operating Procedures for paraffin embedding. The tissue blocks were then sectioned on a rotary microtome set at a thickness of six micrometers and the resulting sections stained with hematoxylin and eosin. The blocks representing cassettes No. 1 through 4 were step-sectioned and three to four sections from each block placed on each

slide. (There are approximately 60 micrometers between each of these sections.) For Cassette No. 5, only one section was usually prepared. Sections were initially prepared from rats in the control and high dose (Group V) groups. Subsequent to the initial evaluation of these sections, the blocks from the male and female rats in the other dose groups (Groups II, III, and IV) were similarly sectioned.

Histopathology Procedures

Morphometry

Mophometric measurements were initially performed in blinded fashion on sections from postpartum day 10 rats in each of the control and high dose (Group V) groups. Subsequently, similar measurements were performed in a non-blinded fashion on sections of brain from male and female rats in the remaining treatment groups. Twenty linear morphometric measurements (two gross and eighteen microscopic) were taken from each postpartum day 10 rat brain. Two of the measurements were taken from the intact brains prior to trimming and processing, as elaborated above. The other eighteen measurements were taken from the histologic sections. (Note that sixteen of these microscopic measurements actually represent eight regions measured bilaterally.) The microscopic morphometric measurements, listed below, were taken with a calibrated, ocular micrometer. (See also Figures 1 – 3).

1) Thickness of the frontal cortex. This measurement, taken bilaterally, was of the dorsal portion of the cerebral cortex within the coronal section passing through the region of the optic chiasm and anterior commissure (Figure 1).
2) Thickness of the parietal cortex. This measurement, taken bilaterally, was of the dorsolateral portion of the cerebral cortex within the coronal section passing through the region of the optic chiasm (Figure 1).
3) Diagonal (maximal) dimension, taken bilaterally, of the striatum and underlying globus pallidus, but not including the underlying nucleus accumbens (Figure 1).
4) Thickness of the corpus callosum, taken bilaterally, within the coronal section passing through the region of the optic chiasm (Figure 1). This measurement was taken at the level of the external granular layer of the overlying cingulate gyrus.
5) Thickness of the hippocampal gyrus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
6) Thickness of the dentate gyrus of the hippocampus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
7) Thickness of the CA1 portion of the hippocampus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
8) Thickness of the CA3 portion of the hippocampus. This measurement, taken bilaterally, was of the distance between the alveus and the dorsal blade of the dentate (Figure 2).
9) Maximum height of the cerebellum at the level of the deep cerebellar nuclei, extending from the roof of the fourth ventricle to the dorsal surface (Figure 3).

10) Thickness of the external germinal layer of the cerebellum. Because the thickness of this layer varies considerably from region to region, six areas were measured over the dorsum of the cerebellum and the mean value recorded as one measurement.

All of the morphometric measurements were performed by the study pathologist using a calibrated ocular micrometer. An indelible ink drop was place on the microslides adjacent to each measured section (*i.e.* the most homologous sections) and the measured sections digitally scanned using a PathScan Enabler™ and a Polaroid SprintScan 35® film scanner. These sections were scanned at a resolution of either 1350 or 2700 dpi, using a pre-scanning calibrated frame to standardize the image size. The digital images were saved in "TIFF" format, and these images then transferred to CD-R compact discs that were archived with the raw data file for this study. An attempt was made to specify the level of the first two measured sections according to A Stereotaxic Atlas of the Developing Rat Brain by Nancy M. Sherwood and Paola S. Timiras (Universty of California Press, 1970).[2] These level designations are also included with the histopathology raw data. The reader should note that this atlas is of Long Evans rats. Even though it includes coronal sections of brains of both Day 10 and Day 21 rats, many of the neuroanatomic features present at the measured levels did not match consistently with those of the Sprague Dawley rats used in this study. Furthermore, in Day 10 rats, the appearance of the coronal sections taken at the same level (*e.g.* judged to be homologous by using a specific anatomic landmark such as the decussation of the anterior commissure as a reference point) varies considerably. Some structures were not measured due either to artifact (usually brain trauma induced during necropsy) or due to the fact that the sections were insufficiently homologous for comparison.

The statistical methods for the quantitative morphometric data were conducted by William Stiteler (Syracuse Research Corporation, Syracuse, N.Y.) using SAS Version 8 software.® The analyses consisted of the following: 1) Bartlett's test for variance homogeneity (tested at the $p \leq 0.001$ level); 2) one-way analysis of variance (ANOVA)-parametric if Bartlett's test yielded a $p \geq 0.001$; 3) Dunnett's control versus treatment comparison t test if the ANOVA was significant at $p \leq 0.05$.

Histopathology

Histopathologic evaluations were performed on the brain sections of between 14 and 16 postpartum day 10 rats per sex in each of the maternal high dosage and control groups. The computer program used for entry of the neuropathologic findings was formatted to require input of specific neuroanatomic regions representative of the section levels examined, although all areas of every brain section were thoroughly examined.

## *FIGURES*

**FIGURE 1** – Coronal section, level 1 (level of anterior commissure) showing the measurements of the frontal cortex, parietal cortex, and striatum/globus pallidus.

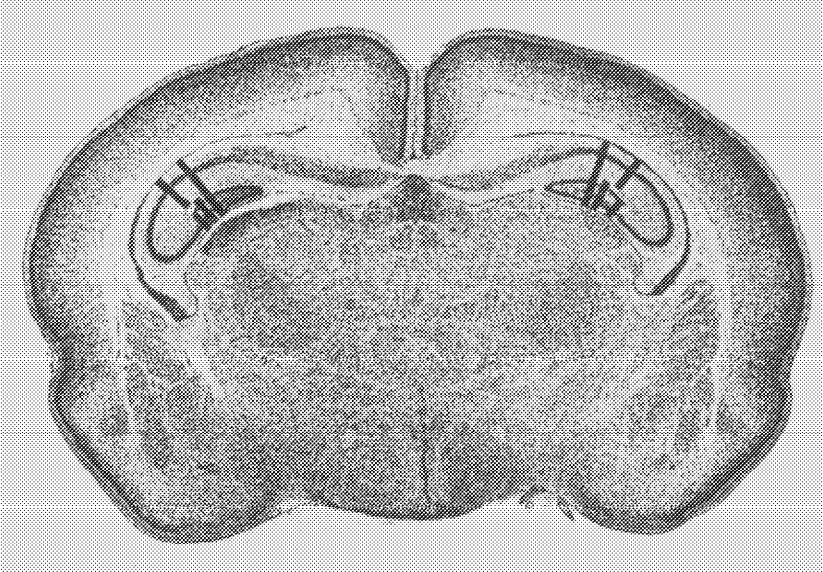

**FIGURE 2** – Coronal section, level 2 (level of the infundibulum) showing the four bilateral measurements of the hippocampus (full-hippocampal thickness, dentate, CA1, and CA3).

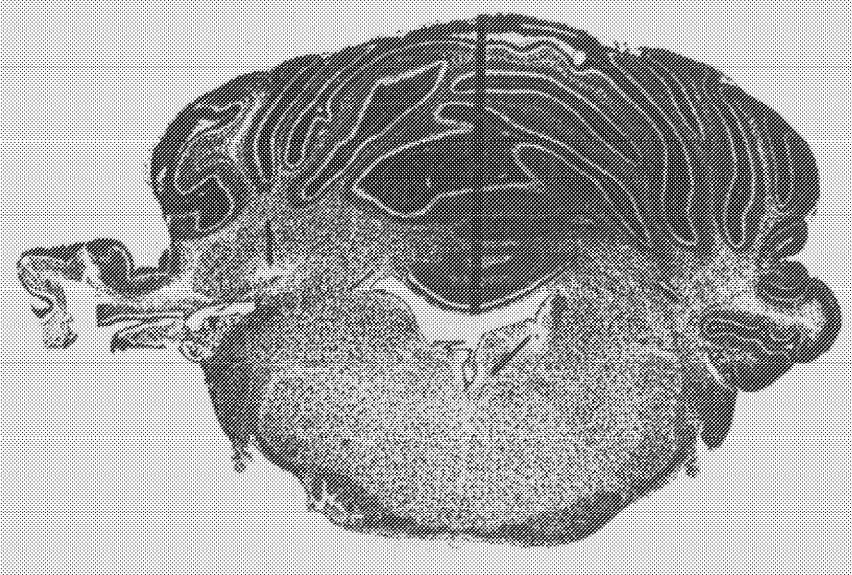

**FIGURE 3** – Coronal section, level 4 (center of cerebellum) showing the vertical full-thickness measurement that was taken. The external germinal layer is evident in this figure, but the specific locations of the six measurements taken of this layer are not depicted. The arrows point to foci of supependymal vesiculation and of vesiculation within the deep cerebellar nuclei.

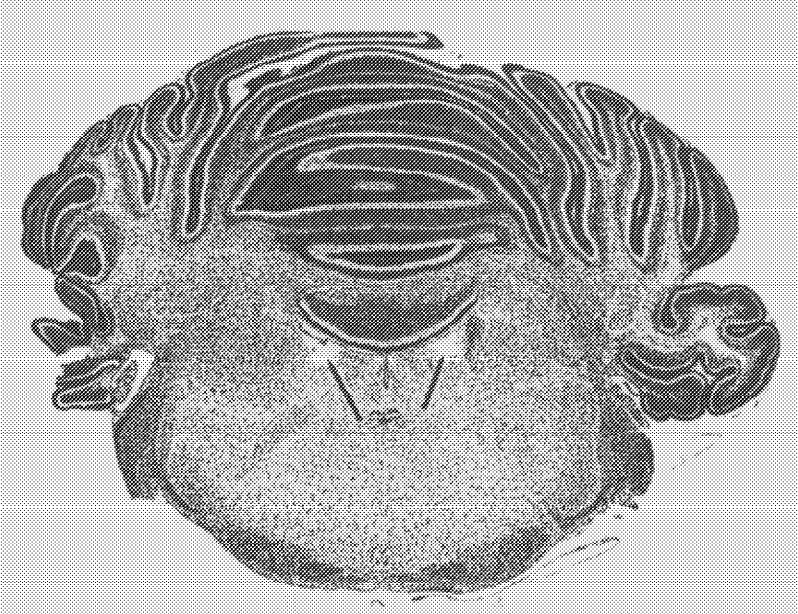

**FIGURE 4** – Another coronal section through the cerebellum showing two foci of symmetric subependymal vesiculation. This is a very common finding in rats of this age and was present to an equal degree in control group and test substance-treated rats.

## RESULTS AND DISCUSSION

Morphometry

The brain weights and morphometric measurements for the male postpartum day 10 rats are presented in Table 1. Similar parameters for the female postpartum day 10 rats are presented in Table 2. There are three pages of morphometric data for each treatment group, with the comparable control group data being repeated on each page for ease of comparison. Twenty linear morphometric measurements (two gross and eighteen microscopic) were taken from each postpartum day 10 rat brain. There are between 11 and 16 rats in each group.

All measurements that were found to differ significantly between any test substance-treated group and the comparable control group are listed in tabular form on the next page.

**Text Table A**
**Measurements Differing Significantly for any Treatment Group vs. the Comparable Controls**

| Neuroanatomic Region | Day 10 Male Rats | Day 10 Female Rats |
|---|---|---|
| Right Frontal Cortex | IV > I @ $p \leq 0.01$ | IV > I @ $p \leq 0.05$ |
| Left Frontal Cortex | IV > I @ $p \leq 0.01$ | |
| Right Parietal Cortex | IV > I @ $p \leq 0.05$ | |
| Left Parietal Cortex | IV > I @ $p \leq 0.05$ | |
| Right Striatum | | III < I @ $p \leq 0.05$ |
| Left Striatum | IV > I @ $p \leq 0.05$ | III < I @ $p \leq 0.05$ |
| Right Corpus Callosum | III > I @ $p \leq 0.01$<br>IV > I @ $p \leq 0.01$ | |
| Left Corpus Callosum | III > I @ $p \leq 0.05$<br>IV > I @ $p \leq 0.01$ | |
| Right Hippocampus | IV > I @ $p \leq 0.05$ | III < I @ $p \leq 0.05$ |
| Left Hippocampus | | III < I @ $p \leq 0.05$ |
| Right CA1 of Hippocampus | IV > I @ $p \leq 0.05$ | III < I @ $p \leq 0.01$<br>IV < I @ $p \leq 0.05$ |
| Left CA1 of Hippocampus | | III < I @ $p \leq 0.01$<br>IV < I @ $p \leq 0.05$ |
| Left CA3 of Hippocampus | V > I @ $p \leq 0.05$ | |
| External Germinal Layer | | II < I @ $p \leq 0.01$<br>III < I @ $p \leq 0.05$ |

The mean values for the linear dimensions of a number of brain regions for both male and female rats were found to be either significantly greater or lesser in certain test substance-treated rat groups in comparison to the comparable control group values. However, unless spurious, there was a sharp difference in the apparent response of the male and female rats to the test substance. For the male rats,

the test substance appeared to have a trophic effect, with a number of brain regions in certain test substance-treated groups being of significantly greater dimension in comparison to control group values. However, there was no evidence of a treatment-related effect on male rat brain weights (see Table 1). A total of 12 measurements were significantly increased in some test substance-treated male rat groups *vs.* male control group values. Two were increased in Group III, 9 in Group IV, and one in Group V. The reason for the apparent enhanced effect in Group IV is not known. The most consistent treatment-related effect in the male rats was on the thickness of the corpus callosum, with this white matter tract being significantly thicker (*vs.* control group values) for the male rats in both Groups III and IV. Statistically significant differences were found for some brain structures in all male treatment groups excepting for Group II, suggesting that 0.01 mg/kg/day may be a no-effect level for the male rat.

In contrast to the pattern noted in the male rats, numerous brain regions were slightly attenuated in the female rats in comparison to control group values. However, there was no evidence of dose-related enhancement in these differences. Although the mean values for the thickness of the external germinal (granular) layer of the cerebellum were significantly lesser for the Group II and III females in comparison to the female control group, this layer is highly variable in thickness and, therefore, is difficult to assess accurately with only six linear measurements. The inter-group difference in the thickness of the external granular layer is, therefore, considered to be of no biologic significance. Based on the variable nature of the female data, it is not clear that any definite treatment effects are present in the female rats on this study.

The group means for brain weights and linear measurements are presented in Text Tables B and C, below.

**Text Table B**

**Group Means for Brain Weights and for Morphometry Data – Postpartum Day 10 Male Rats**

| Dose Group ID | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| I | 1.104 | 11.9 | 4.9 | 1082 | 1114 | 1272 | 1285 |
| II | 1.076 | 12.0 | 4.9 | 1142 | 1150 | 1289 | 1275 |
| III | 1.087 | 12.0 | 4.8 | 1145 | 1137 | 1329 | 1322 |
| IV | 1.120 | 12.2 | 5.0 | 1224** | 1247** | 1380* | 1398* |
| V | 1.148 | 12.1 | 4.9 | 1131 | 1155 | 1328 | 1306 |

| Dose Group ID | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| I | 2001 | 2002 | 307 | 316 | 926 | 927 | 449 |
| II | 1956 | 1958 | 293 | 290 | 927 | 924 | 468 |
| III | 1975 | 1985 | 384** | 381* | 936 | 914 | 447 |
| IV | 2078 | 2104* | 374** | 391** | 1005* | 950 | 494 |
| V | 2038 | 2040 | 347 | 350 | 949 | 949 | 456 |

* **Significantly different from the control group value at $p \leq 0.05$**
** **Significantly different from the control group value at $p \leq 0.01$**

## Text Table B, Continued

**Group Means for Brain Weights and for Morphometry Data – Postpartum Day 10 Male Rats**

| Dose Group ID | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| I | 453 | 468 | 473 | 291 | 274 | 2822 | 36 |
| II | 470 | 451 | 444 | 297 | 285 | 2685 | 36 |
| III | 445 | 482 | 460 | 279 | 271 | 2904 | 37 |
| IV | 474 | 507* | 471 | 321 | 282 | 2829 | 38 |
| V | 475 | 491 | 466 | 296 | 304* | 2921 | 40 |

* Significantly different from the control group value at $p \leq 0.05$
** Significantly different from the control group value at $p \leq 0.01$

## Text Table C

**Group Means for Brain Weights and for Morphometry Data - Postpartum Day 10 Female Rats**

| Dose Group ID | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| I | 1.104 | 12.1 | 5.1 | 1134 | 1155 | 1332 | 1319 |
| II | 1.063 | 11.8 | 4.9 | 1170 | 1150 | 1325 | 1319 |
| III | 1.016 | 11.7 | 4.9 | 1123 | 1142 | 1280 | 1274 |
| IV | 1.091 | 12.1 | 5.0 | 1261* | 1246 | 1400 | 1406 |
| V | 1.081 | 12.1 | 4.9 | 1147 | 1197 | 1357 | 1336 |

| Dose Group ID | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| I | 1983 | 1979 | 338 | 343 | 997 | 947 | 472 |
| II | 1931 | 1942 | 313 | 308 | 950 | 912 | 460 |
| III | 1858* | 1859* | 289 | 292 | 895* | 859* | 434 |
| IV | 2074 | 2070 | 327 | 324 | 946 | 910 | 478 |
| V | 1995 | 2045 | 291 | 298 | 938 | 922 | 458 |

| Dose Group ID | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| I | 467 | 510 | 469 | 312 | 275 | 2838 | 39 |
| II | 456 | 474 | 444 | 300 | 272 | 2653 | 33** |
| III | 434 | 460** | 427** | 284 | 266 | 2633 | 35* |
| IV | 466 | 469* | 437* | 291 | 267 | 2691 | 38 |
| V | 461 | 475 | 453 | 291 | 283 | 2848 | 36 |

* Significantly different from the control group value ($p \leq 0.05$)
** Significantly different from the control group value at $p \leq 0.01$

Several trends are apparent in the morphometry data. Firstly, all of the statistically significant differences for the treated male rats are for greater values in the rats exposed to the test chemical *vs.* the controls. Secondly, the greatest numbers of affected areas and greatest statistical significances are present in the Group IV postpartum day 10 male rats. Thirdly, there is a reverse trend in the female rats – *i.e.* for decreases in certain dimensions in test substance-treated groups. The neuroanatomic regions that most consistently showed statistically significant inter-group differences were the corpus callosum for the male rats and the CA1 region of the hippocampus for the females.

The corpus callosa were found to be significantly thicker for the male rats in Groups III and IV in comparison to the Control Group values. The mean values for the thickness of the corpus callosa were also higher in Group V than in the Control group, but this inter-group difference was not statistically significant. For the female rats, the mean thicknesses of the corpus callosa were thinner in treated groups than in the Control Group, but these differences were not statistically significant. Whether these inter-group differences indicate random variation, lack of section homology, or a differential dose effect awaits further deliberation and, possibly, additional section evaluation. [NOTE: The corpus callosa are poorly developed at the postpartum day 10 stage, so measurements of thickness could only be performed consistently within the Level 1 section. The corpus callosum was not always present within the section taken through the infundibulum, even though shown in Figure 2, above].

The sex-related difference in the thickness of the corpus callosa contrasts with the findings from a developmental neurotoxicity study previously conducted on this same test chemical.[1] In this prior study, thicker corpus callosa were seen for both sexes of postpartum day 12 rat in the maternal high dose group (10 mg/kg/day), but the difference was greatest for the females. Nevertheless, the fact that thicker corpus callosa were found in both studies, coupled with a general trend in the current study for there to be slightly greater dimensions for a number of other brain structures in the male rats, suggests the possibility of a treatment-related effect. Based on the limited linear measurements taken on these brains, Group II would appear to be a no-effect level for the male rats. Although one statistically significant difference is present for the Group II females, this measurement (*i.e.* thickness of the external germinal layer of the cerebellum) is not considered to be of biologic significance.

In a recent publication, altered TSH and thyroid hormone levels are reported for Sprague-Dawley rats receiving ammonium perchlorate in the drinking water for 90 days at levels ranging from 0.05 mg/kg/day to 10.0 mg/kg./day, well within the dosage range of the present study.[3] (TSH levels were increased and the levels of $T_3$ and $T_4$ were decreased in response to treatment.) Although similar hormonal effects were reported in this published study for both male and female rats, values for TSH, $T_3$ and $T_4$ are normally lower for female rats than for males. It is possible, therefore, that these sex-related hormonal differences might explain the pattern of sexual dimorphism in brain morphometry noted in the current study.

Further in-depth data interpretation may require the taking of additional morphometric measurements such as areas rather than linear measures. It is also recommended that a non-blinded comparison be performed of section homology prior to final data interpretation. There has been insufficient time to perform such an evaluation prior to submission of these data.

Histopathology

The histopathologic findings on this study are summarized for the postpartum day 10 male rats in Table 3 and for the postpartum day 10 female rats in Table 4. Individual animal data (which includes the distributions of the microscopic alterations) are presented in Tables 5 and 6. Although the brain sections of male and female rats in Group IV were also examined for the presence of any microscopic abnormalities, no differences were noted between the microscopic appearances of these brains and those of the control group rats. Data for the Group IV rats were, therefore, not entered into the computer data base for this study.

The brains of day 10 postpartum rats are undergoing rapid development, and this development includes the presence of a general background of cell degeneration (often referred to as physiologic cell death or "apoptosis"). There are also some rather characteristic foci of cell degeneration that tend to be in periventricular locations. The latter foci undoubtedly relate to remodeling of the ependymal epithelial linings of the ventricles. [NOTE: See Figures 3 and 4 for low-power photographs of the foci of vesiculation present beneath the fourth ventricle and within the deep cerebellar nuclei.} Although these foci of cell degeneration are normal within the developing brain, some of the most prominent foci were documented and graded in this study in order to be sure that no treatment-related differences in the locations or degrees of these processes had been present. These findings were variably categorized as vesiculation, subependymal vesiculation, or para-acqueductal vesiculation depending on the specific location of the alteration. All of these foci basically represent the same process - *i.e.* that of cell loss resulting in secondary (and temporary) cyst or cleft formation. Exposure to the test substance did not impact on the frequency or appearances of these foci.

## CONCLUSIONS

Detailed microscopic examinations of multiple coronal brain sections from postpartum day 10 rats in each of the treatment groups failed to indicate any evidence of treatment-related neuropathologic alterations or of microscopic developmental anomalies. However, there was evidence of potentially treatment-related effects relating to increased sizes of a variety of brain structures for the male rats in Groups III, IV and V. (The mean values of 12 linear dimensions were found to be significantly increased in treated males.) For the female rats in Groups II, III, IV, and V, a variety of linear dimensions differed significantly in comparison to control group values, with most being decreased in comparison to control group values. The reason for the sexually dimorphic pattern is unknown. However, unless the male control group on this study is not representative, these data suggest an effect of the treatment on at least the male rats in the top three dose groups. While it is less clear that a biologically significant treatment effect is present in the female rats, the trend for a treatment-related decrease in the sizes of certain brain structures suggests that additional measurements and data interpretation may be indicated.

Robert H. Garman 3-10-01

Robert H. Garman, DVM — Date
Diplomate, ACVP

## REFERENCES

1. *A Neurobehavioral Developmental Study of Ammonium Perchlorate Administered Orally in Drinking Water to Rats – Neuropathology Report on $F_1$ Day 12 Postpartum Rats*; Argus Protocol 1613-002; Sponsor's study No. 7757A210-1096-25F, 1998

2. Sherwood, NM and Timiras, PS: A Stereotoxic Atlas of the Developing Rat Brain. University of California Press, Berkeley and Los Angeles, CA; © 1970, 209 pages

3. Siglin, JC, Mattie, DR, Dodd, DE, Hildebrandt, PK, and Baker, WH: A 90-day drinking water toxicity study in rats of the environmental contaminant ammonium perchlorate. *Toxicological Sciences* 57: 61-74, 2000

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**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.161 | 12.2 | 5.1 | 1128 | 1224 | 1296 | 1464 |
| 16617 | 1.084 | 12.1 | 5.2 | 1176 | 1200 | 1272 | 1296 |
| 16618 | 1.003 | 11.0 | 5.0 | 1080 | 1008 | 1224 | 1152 |
| 16619 | 1.111 | 12.0 | 4.7 | 1104 | 1152 | 1272 | 1296 |
| 16620 | 1.197 | 12.2 | 4.6 | 1008 | 1152 | 1200 | 1440 |
| 16621 | 1.023 | 11.6 | 4.9 | 1152 | 984 | 1200 | 1128 |
| 16623 | 1.128 | 12.0 | 4.7 | 1032 | 1224 | 1200 | 1320 |
| 16625 | 1.168 | 11.8 | 5.5 | 960 | 1032 | 1344 | 1272 |
| 16626 | 1.221 | 12.5 | 5.3 | 1344 | 1296 | 1416 | 1392 |
| 16629 | 1.136 | 12.1 | 5.2 | 984 | 1056 | 1320 | 1224 |
| 16630 | 1.275 | 12.3 | 4.8 | 1152 | 1176 | 1344 | 1368 |
| 16634 | 1.104 | 11.9 | 5.0 | 1032 | 1080 | 1296 | 1296 |
| 16636 | 0.988 | 11.8 | 4.8 | 1008 | 1056 | 1296 | ---- |
| 16637 | 0.859 | 10.8 | 4.2 | 984 | 960 | 1128 | 1056 |
| **MEAN** | **1.104** | **11.9** | **4.9** | **1082** | **1114** | **1272** | **1285** |
| **SD** | **0.108** | **0.5** | **0.3** | **103.7** | **103.0** | **75.3** | **120.6** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 1.169 | 12.1 | 5.3 | 1368 | 1344 | 1344 | 1344 |
| 16641 | 1.152 | 12.0 | 5.5 | 1344 | 1344 | 1296 | 1296 |
| 16643 | 1.170 | 12.2 | 5.0 | 1176 | 1176 | 1416 | 1296 |
| 16644 | 0.887 | 11.2 | 4.5 | 1056 | 1080 | 1176 | 1200 |
| 16646 | 1.176 | 12.5 | 5.0 | 1200 | 1008 | 1344 | 1080 |
| 16647 | 1.086 | 12.2 | 5.0 | 1008 | 1224 | 1200 | 1368 |
| 16649 | 1.017 | 11.7 | 4.2 | 888 | 888 | 1128 | 1104 |
| 16650 | 1.113 | 12.6 | 5.0 | 1104 | 1128 | 1152 | 1344 |
| 16651 | 1.191 | 13.0 | 5.4 | 1416 | 1296 | 1704 | 1512 |
| 16654 | 0.980 | 11.5 | 4.0 | 984 | 1032 | 1200 | 1272 |
| 16655 | 1.216 | 12.2 | 5.2 | 1128 | 1320 | 1368 | 1392 |
| 16656 | 1.024 | 11.6 | 5.5 | 1200 | 1176 | 1248 | 1224 |
| 16657 | 0.992 | 12.0 | 5.2 | 1128 | 1128 | 1224 | 1224 |
| 16659 | 0.896 | 11.0 | 4.0 | 984 | 960 | 1248 | 1200 |
| **MEAN** | **1.076** | **12.0** | **4.9** | **1142** | **1150** | **1289** | **1275** |
| **SD** | **0.110** | **0.5** | **0.5** | **156.0** | **146.0** | **147.2** | **115.2** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2400 | 2328 | 269 | 307 | 1104 | 1008 | 552 |
| 16617 | 1920 | 2016 | 307 | 288 | 864 | 888 | 432 |
| 16618 | ---- | 1872 | 336 | 307 | 840 | 888 | 432 |
| 16619 | 1920 | 1920 | 250 | 250 | 960 | 936 | 456 |
| 16620 | 1944 | 2040 | 288 | 403 | 912 | 960 | 480 |
| 16621 | 1920 | 1920 | 288 | 298 | 888 | 936 | 456 |
| 16623 | 1944 | 1992 | 384 | 413 | 888 | 1032 | 432 |
| 16625 | 2088 | 2040 | 298 | 288 | 960 | 888 | 432 |
| 16626 | 2088 | 2040 | 336 | 346 | 984 | 936 | 480 |
| 16629 | 2040 | 2016 | 346 | 298 | 888 | 936 | 360 |
| 16630 | 2160 | 2160 | 298 | 298 | 912 | 864 | 432 |
| 16634 | 1944 | 1944 | 317 | 346 | 1080 | 960 | 528 |
| 16636 | 1968 | 1992 | 278 | 250 | 888 | 912 | 432 |
| 16637 | 1680 | 1752 | ---- | 336 | 792 | 840 | 384 |
| **MEAN** | **2001** | **2002** | **307** | **316** | **926** | **927** | **449** |
| **SD** | **167.0** | **133.7** | **36.1** | **48.6** | **86.1** | **52.9** | **50.2** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 2016 | 1992 | 278 | 288 | 912 | 912 | 480 |
| 16641 | 2064 | 2064 | 336 | 336 | 840 | 840 | 456 |
| 16643 | 1872 | 1896 | 288 | 307 | 888 | 960 | 432 |
| 16644 | 1824 | 1944 | 326 | 336 | 840 | 912 | 432 |
| 16646 | 2040 | 2064 | 250 | 250 | 1008 | 1032 | 528 |
| 16647 | 1896 | 1896 | 307 | 240 | 960 | 864 | 432 |
| 16649 | 1848 | 1872 | 365 | 355 | 888 | 912 | 432 |
| 16650 | 2112 | 2136 | 298 | 298 | 1104 | 1176 | 576 |
| 16651 | 2280 | 2160 | 336 | 288 | 960 | 960 | 528 |
| 16654 | 1896 | 1800 | ---- | ---- | 1008 | 888 | 504 |
| 16655 | 2088 | 2040 | 269 | 288 | 960 | 912 | 480 |
| 16656 | 1848 | 1920 | 269 | 269 | 888 | 840 | 456 |
| 16657 | 1848 | 1848 | 221 | 250 | 936 | 960 | 480 |
| 16659 | 1752 | 1776 | 269 | 259 | 792 | 768 | 336 |
| **MEAN** | **1956** | **1958** | **293** | **290** | **927** | **924** | **468** |
| **SD** | **146.1** | **120.8** | **40.0** | **36.4** | **81.3** | **97.3** | **57.8** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 480 | 528 | 504 | 384 | 288 | 3072 | 29 |
| 16617 | 432 | 408 | 408 | 240 | 264 | 2736 | 31 |
| 16618 | 408 | 408 | 432 | 288 | 288 | 2736 | 29 |
| 16619 | 456 | 504 | 432 | 288 | 264 | 2928 | 36 |
| 16620 | 480 | 432 | 456 | 288 | 312 | 2880 | 34 |
| 16621 | 432 | 456 | 456 | 288 | 288 | 2592 | 41 |
| 16623 | 528 | 456 | 480 | 312 | 288 | 2976 | 34 |
| 16625 | 432 | 504 | 456 | 312 | 288 | 2928 | 36 |
| 16626 | 480 | 456 | 432 | 312 | 240 | 2976 | 36 |
| 16629 | 456 | 528 | 480 | 240 | 288 | 2880 | 46 |
| 16630 | 432 | 432 | 648 | 264 | 240 | 3024 | 41 |
| 16634 | 456 | 528 | 504 | 360 | 288 | 3024 | 38 |
| 16636 | 480 | 480 | 480 | 240 | 216 | 2496 | 36 |
| 16637 | 384 | 432 | 456 | 264 | 288 | 2256 | 38 |
| **MEAN** | **453** | **468** | **473** | **291** | **274** | **2822** | **36** |
| **SD** | **36.3** | **43.9** | **57.6** | **43.0** | **26.1** | **234.5** | **4.7** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 504 | 456 | 432 | 288 | 312 | 2976 | 34 |
| 16641 | 480 | 336 | 336 | 336 | 336 | 2832 | 38 |
| 16643 | 504 | 456 | 408 | 288 | 288 | 2736 | 29 |
| 16644 | 480 | 456 | 408 | 264 | 312 | 2304 | 38 |
| 16646 | 528 | 480 | 528 | 312 | 312 | 3024 | 34 |
| 16647 | 408 | 528 | 456 | 312 | 264 | 2640 | 38 |
| 16649 | 456 | 432 | 432 | 288 | 288 | 2448 | 34 |
| 16650 | 552 | 504 | 552 | 336 | 312 | 2832 | 43 |
| 16651 | 504 | 432 | 456 | 312 | 288 | 2880 | 29 |
| 16654 | 432 | 480 | 456 | 312 | 240 | 2448 | 38 |
| 16655 | 480 | 456 | 456 | 312 | 264 | 2976 | 34 |
| 16656 | 384 | 432 | 456 | 264 | 216 | 2544 | 41 |
| 16657 | 528 | 456 | 432 | 288 | 312 | 2592 | 38 |
| 16659 | 336 | 408 | 408 | 240 | 240 | 2352 | 38 |
| **MEAN** | **470** | **451** | **444** | **297** | **285** | **2685** | **36** |
| **SD** | **60.8** | **45.3** | **52.2** | **27.6** | **35.0** | **242.9** | **4.0** |

**No values are significantly different from those of the control group (Group I).**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.161 | 12.2 | 5.1 | 1128 | 1224 | 1296 | 1464 |
| 16617 | 1.084 | 12.1 | 5.2 | 1176 | 1200 | 1272 | 1296 |
| 16618 | 1.003 | 11.0 | 5.0 | 1080 | 1008 | 1224 | 1152 |
| 16619 | 1.111 | 12.0 | 4.7 | 1104 | 1152 | 1272 | 1296 |
| 16620 | 1.197 | 12.2 | 4.6 | 1008 | 1152 | 1200 | 1440 |
| 16621 | 1.023 | 11.6 | 4.9 | 1152 | 984 | 1200 | 1128 |
| 16623 | 1.128 | 12.0 | 4.7 | 1032 | 1224 | 1200 | 1320 |
| 16625 | 1.168 | 11.8 | 5.5 | 960 | 1032 | 1344 | 1272 |
| 16626 | 1.221 | 12.5 | 5.3 | 1344 | 1296 | 1416 | 1392 |
| 16629 | 1.136 | 12.1 | 5.2 | 984 | 1056 | 1320 | 1224 |
| 16630 | 1.275 | 12.3 | 4.8 | 1152 | 1176 | 1344 | 1368 |
| 16634 | 1.104 | 11.9 | 5.0 | 1032 | 1080 | 1296 | 1296 |
| 16636 | 0.988 | 11.8 | 4.8 | 1008 | 1056 | 1296 | ---- |
| 16637 | 0.859 | 10.8 | 4.2 | 984 | 960 | 1128 | 1056 |
| **MEAN** | **1.104** | **11.9** | **4.9** | **1082** | **1114** | **1272** | **1285** |
| **SD** | **0.108** | **0.5** | **0.3** | **103.7** | **103.0** | **75.3** | **120.6** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16664 | 1.091 | 11.7 | 4.3 | 1200 | 1176 | 1416 | 1296 |
| 16667 | 1.167 | 12.2 | 5.0 | 1320 | 1224 | 1440 | 1512 |
| 16668 | 1.268 | 12.5 | 5.2 | 1296 | 1248 | 1536 | 1560 |
| 16669 | 1.070 | 12.0 | 4.6 | 1032 | 1032 | 1272 | 1272 |
| 16670 | 1.000 | 11.5 | 4.8 | 1008 | 1032 | 1272 | 1320 |
| 16673 | 1.044 | 11.8 | 4.8 | 1128 | 1032 | 1440 | 1224 |
| 16675 | 1.095 | 12.1 | 5.2 | 1128 | 1224 | 1272 | 1344 |
| 16676 | 1.076 | 12.0 | 4.6 | 1104 | 1200 | 1416 | 1344 |
| 16678 | 1.006 | 11.3 | 4.2 | 1080 | 1128 | 1200 | 1248 |
| 16679 | 1.179 | 12.7 | 5.7 | 1224 | 1224 | 1320 | 1344 |
| 16683 | 0.967 | 11.8 | 4.2 | 1080 | 984 | 1032 | 1080 |
| **MEAN** | **1.087** | **12.0** | **4.8** | **1145** | **1137** | **1329** | **1322** |
| **SD** | **0.089** | **0.4** | **0.5** | **102.4** | **98.5** | **140.5** | **130.8** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2400 | 2328 | 269 | 307 | 1104 | 1008 | 552 |
| 16617 | 1920 | 2016 | 307 | 288 | 864 | 888 | 432 |
| 16618 | - | 1872 | 336 | 307 | 840 | 888 | 432 |
| 16619 | 1920 | 1920 | 250 | 250 | 960 | 936 | 456 |
| 16620 | 1944 | 2040 | 288 | 403 | 912 | 960 | 480 |
| 16621 | 1920 | 1920 | 288 | 298 | 888 | 936 | 456 |
| 16623 | 1944 | 1992 | 384 | 413 | 888 | 1032 | 432 |
| 16625 | 2088 | 2040 | 298 | 288 | 960 | 888 | 432 |
| 16626 | 2088 | 2040 | 336 | 346 | 984 | 936 | 480 |
| 16629 | 2040 | 2016 | 346 | 298 | 888 | 936 | 360 |
| 16630 | 2160 | 2160 | 298 | 298 | 912 | 864 | 432 |
| 16634 | 1944 | 1944 | 317 | 346 | 1080 | 960 | 528 |
| 16636 | 1968 | 1992 | 278 | 250 | 888 | 912 | 432 |
| 16637 | 1680 | 1752 | - | 336 | 792 | 840 | 384 |
| **MEAN** | **2001** | **2002** | **307** | **316** | **926** | **927** | **449** |
| **SD** | **167.0** | **133.7** | **36.1** | **48.6** | **86.1** | **52.9** | **50.2** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16664 | 2040 | 1920 | 461 | 461 | 936 | 888 | 432 |
| 16667 | 2112 | 2088 | ---- | ---- | 936 | 888 | 480 |
| 16668 | 2112 | 2040 | 480 | 480 | 960 | 960 | 456 |
| 16669 | 1968 | 1920 | 384 | ---- | 816 | 960 | 312 |
| 16670 | 1992 | 2064 | 442 | 384 | 1008 | 816 | 504 |
| 16673 | 1920 | 2088 | 326 | 317 | 984 | 912 | 504 |
| 16675 | 2016 | 1920 | 278 | 269 | 864 | 840 | 312 |
| 16676 | 1944 | 2016 | 451 | 480 | 936 | 912 | 456 |
| 16678 | 1824 | 1920 | 384 | 384 | 936 | 960 | 456 |
| 16679 | 1896 | 1920 | 298 | 298 | 1032 | 960 | 552 |
| 16683 | 1896 | 1944 | 336 | 355 | 888 | 960 | 456 |
| **MEAN** | **1975** | **1985** | **384**** | **381*** | **936** | **914** | **447** |
| **SD** | **91.1** | **73.7** | **72.5** | **79.2** | **62.6** | **52.0** | **74.6** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 480 | 528 | 504 | 384 | 288 | 3072 | 29 |
| 16617 | 432 | 408 | 408 | 240 | 264 | 2736 | 31 |
| 16618 | 408 | 408 | 432 | 288 | 288 | 2736 | 29 |
| 16619 | 456 | 504 | 432 | 288 | 264 | 2928 | 36 |
| 16620 | 480 | 432 | 456 | 288 | 312 | 2880 | 34 |
| 16621 | 432 | 456 | 456 | 288 | 288 | 2592 | 41 |
| 16623 | 528 | 456 | 480 | 312 | 288 | 2976 | 34 |
| 16625 | 432 | 504 | 456 | 312 | 288 | 2928 | 36 |
| 16626 | 480 | 456 | 432 | 312 | 240 | 2976 | 36 |
| 16629 | 456 | 528 | 480 | 240 | 288 | 2880 | 46 |
| 16630 | 432 | 432 | 648 | 264 | 240 | 3024 | 41 |
| 16634 | 456 | 528 | 504 | 360 | 288 | 3024 | 38 |
| 16636 | 480 | 480 | 480 | 240 | 216 | 2496 | 36 |
| 16637 | 384 | 432 | 456 | 264 | 288 | 2256 | 38 |
| **MEAN** | **453** | **468** | **473** | **291** | **274** | **2822** | **36** |
| **SD** | **36.3** | **43.9** | **57.6** | **43.0** | **26.1** | **234.5** | **4.7** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16664 | 408 | 504 | 456 | 264 | 240 | 2928 | 43 |
| 16667 | 456 | 456 | 432 | 264 | 264 | 3120 | 34 |
| 16668 | 504 | 456 | 480 | 288 | 288 | 3168 | 34 |
| 16669 | 456 | 480 | 480 | 240 | 288 | 2880 | 34 |
| 16670 | 360 | 504 | 432 | 312 | 216 | ---- | 29 |
| 16673 | 456 | 504 | 456 | 336 | 288 | 2784 | 34 |
| 16675 | 360 | 528 | 480 | 216 | 216 | 3072 | 36 |
| 16676 | 456 | 480 | 432 | 288 | 288 | 2544 | 43 |
| 16678 | 480 | 480 | 480 | 288 | 288 | 2640 | 38 |
| 16679 | 480 | 480 | 456 | 336 | 288 | 3312 | 43 |
| 16683 | 480 | 432 | 480 | 240 | 312 | 2592 | 34 |
| **MEAN** | **445** | **482** | **460** | **279** | **271** | **2904** | **37** |
| **SD** | **48.4** | **27.3** | **21.0** | **39.1** | **32.4** | **263.2** | **4.7** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.161 | 12.2 | 5.1 | 1128 | 1224 | 1296 | 1464 |
| 16617 | 1.084 | 12.1 | 5.2 | 1176 | 1200 | 1272 | 1296 |
| 16618 | 1.003 | 11.0 | 5.0 | 1080 | 1008 | 1224 | 1152 |
| 16619 | 1.111 | 12.0 | 4.7 | 1104 | 1152 | 1272 | 1296 |
| 16620 | 1.197 | 12.2 | 4.6 | 1008 | 1152 | 1200 | 1440 |
| 16621 | 1.023 | 11.6 | 4.9 | 1152 | 984 | 1200 | 1128 |
| 16623 | 1.128 | 12.0 | 4.7 | 1032 | 1224 | 1200 | 1320 |
| 16625 | 1.168 | 11.8 | 5.5 | 960 | 1032 | 1344 | 1272 |
| 16626 | 1.221 | 12.5 | 5.3 | 1344 | 1296 | 1416 | 1392 |
| 16629 | 1.136 | 12.1 | 5.2 | 984 | 1056 | 1320 | 1224 |
| 16630 | 1.275 | 12.3 | 4.8 | 1152 | 1176 | 1344 | 1368 |
| 16634 | 1.104 | 11.9 | 5.0 | 1032 | 1080 | 1296 | 1296 |
| 16636 | 0.988 | 11.8 | 4.8 | 1008 | 1056 | 1296 | ---- |
| 16637 | 0.859 | 10.8 | 4.2 | 984 | 960 | 1128 | 1056 |
| **MEAN** | **1.104** | **11.9** | **4.9** | **1082** | **1114** | **1272** | **1285** |
| **SD** | **0.108** | **0.5** | **0.3** | **103.7** | **103.0** | **75.3** | **120.6** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 1.228 | 12.3 | 4.6 | 1320 | 1368 | 1512 | 1488 |
| 16686 | 1.110 | 12.0 | 4.8 | 1152 | 1200 | 1320 | 1344 |
| 16687 | 1.253 | 12.7 | 5.0 | 1248 | 1248 | 1368 | 1368 |
| 16688 | 1.073 | 11.8 | 4.5 | 1200 | 1176 | 1368 | 1296 |
| 16689 | 1.026 | 12.0 | 5.1 | 1224 | 1320 | 1320 | 1440 |
| 16690 | 1.088 | 12.1 | 5.4 | 1152 | 1272 | 1440 | 1416 |
| 16692 | 1.037 | 12.0 | 4.8 | 1128 | 1248 | 1296 | 1368 |
| 16693 | 1.253 | 12.8 | 5.3 | 1320 | 1320 | 1512 | 1440 |
| 16695 | 1.114 | 12.1 | 5.4 | 1032 | 1080 | 1296 | 1368 |
| 16696 | 1.116 | 12.0 | 4.8 | 1320 | 1296 | 1344 | 1392 |
| 16697 | 1.187 | 12.4 | 5.0 | 1296 | 1224 | 1392 | 1344 |
| 16698 | 0.997 | 11.8 | 5.1 | 1104 | 1128 | 1344 | 1296 |
| 16699 | 1.247 | 12.6 | 5.0 | 1440 | 1248 | 1344 | 1464 |
| 16701 | 1.091 | 12.1 | 5.2 | 1248 | 1200 | 1320 | 1320 |
| 16706 | 1.098 | 12.2 | 5.0 | 1296 | 1368 | 1536 | 1536 |
| 16707 | 0.999 | 11.9 | 5.0 | 1104 | 1248 | 1368 | 1488 |
| **MEAN** | **1.120** | **12.2** | **5.0** | **1224**** | **1247**** | **1380*** | **1398*** |
| **SD** | **0.089** | **0.3** | **0.3** | **107.0** | **79.6** | **78.4** | **72.5** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2400 | 2328 | 269 | 307 | 1104 | 1008 | 552 |
| 16617 | 1920 | 2016 | 307 | 288 | 864 | 888 | 432 |
| 16618 | ---- | 1872 | 336 | 307 | 840 | 888 | 432 |
| 16619 | 1920 | 1920 | 250 | 250 | 960 | 936 | 456 |
| 16620 | 1944 | 2040 | 288 | 403 | 912 | 960 | 480 |
| 16621 | 1920 | 1920 | 288 | 298 | 888 | 936 | 456 |
| 16623 | 1944 | 1992 | 384 | 413 | 888 | 1032 | 432 |
| 16625 | 2088 | 2040 | 298 | 288 | 960 | 888 | 432 |
| 16626 | 2088 | 2040 | 336 | 346 | 984 | 936 | 480 |
| 16629 | 2040 | 2016 | 346 | 298 | 888 | 936 | 360 |
| 16630 | 2160 | 2160 | 298 | 298 | 912 | 864 | 432 |
| 16634 | 1944 | 1944 | 317 | 346 | 1080 | 960 | 528 |
| 16636 | 1968 | 1992 | 278 | 250 | 888 | 912 | 432 |
| 16637 | 1680 | 1752 | - | 336 | 792 | 840 | 384 |
| **MEAN** | **2001** | **2002** | **307** | **316** | **926** | **927** | **449** |
| **SD** | **167.0** | **133.7** | **36.1** | **48.6** | **86.1** | **52.9** | **50.2** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 2064 | 2136 | 298 | 326 | 1032 | 1032 | 480 |
| 16686 | 1920 | 1992 | 346 | 355 | 936 | 1056 | 432 |
| 16687 | 2112 | 2088 | 346 | 336 | 912 | 912 | 480 |
| 16688 | 2064 | 2160 | 355 | 374 | 1152 | 1008 | 576 |
| 16689 | 2136 | 2136 | 480 | 499 | 888 | 840 | 360 |
| 16690 | 2112 | 2064 | 422 | 403 | 936 | 984 | 480 |
| 16692 | 2064 | 2064 | 365 | 422 | 1080 | 936 | 552 |
| 16693 | 2160 | 2160 | 403 | 509 | 1128 | 984 | 600 |
| 16695 | 2088 | 2184 | 384 | 432 | 1128 | 960 | 552 |
| 16696 | 2088 | 2112 | 480 | 442 | 984 | 960 | 480 |
| 16697 | 2112 | 2184 | 336 | 336 | 984 | 936 | 528 |
| 16698 | 1992 | 2064 | 374 | 374 | 984 | 792 | 456 |
| 16699 | 2232 | 2232 | 307 | 307 | 1008 | 984 | 504 |
| 16701 | 1992 | 2040 | 346 | 336 | 864 | 912 | 384 |
| 16706 | 2064 | 2064 | 384 | 413 | 1032 | 912 | 504 |
| 16707 | 2040 | 1992 | 365 | 384 | 1032 | 984 | 528 |
| **MEAN** | **2078** | **2104*** | **374**** | **391**** | **1005*** | **950** | **494** |
| **SD** | **72.8** | **70.0** | **52.0** | **59.8** | **86.7** | **67.3** | **65.0** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 480 | 528 | 504 | 384 | 288 | 3072 | 29 |
| 16617 | 432 | 408 | 408 | 240 | 264 | 2736 | 31 |
| 16618 | 408 | 408 | 432 | 288 | 288 | 2736 | 29 |
| 16619 | 456 | 504 | 432 | 288 | 264 | 2928 | 36 |
| 16620 | 480 | 432 | 456 | 288 | 312 | 2880 | 34 |
| 16621 | 432 | 456 | 456 | 288 | 288 | 2592 | 41 |
| 16623 | 528 | 456 | 480 | 312 | 288 | 2976 | 34 |
| 16625 | 432 | 504 | 456 | 312 | 288 | 2928 | 36 |
| 16626 | 480 | 456 | 432 | 312 | 240 | 2976 | 36 |
| 16629 | 456 | 528 | 480 | 240 | 288 | 2880 | 46 |
| 16630 | 432 | 432 | 648 | 264 | 240 | 3024 | 41 |
| 16634 | 456 | 528 | 504 | 360 | 288 | 3024 | 38 |
| 16636 | 480 | 480 | 480 | 240 | 216 | 2496 | 36 |
| 16637 | 384 | 432 | 456 | 264 | 288 | 2256 | 38 |
| **MEAN** | **453** | **468** | **473** | **291** | **274** | **2822** | **36** |
| **SD** | **36.3** | **43.9** | **57.6** | **43.0** | **26.1** | **234.5** | **4.7** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 480 | 600 | 480 | 288 | 288 | 2928 | 41 |
| 16686 | 552 | 504 | 504 | 312 | 312 | 2928 | 34 |
| 16687 | 480 | 456 | 432 | 288 | 288 | 3072 | 43 |
| 16688 | 480 | 552 | 528 | 360 | 288 | 2880 | 36 |
| 16689 | 384 | 480 | 456 | 264 | 240 | 2736 | 38 |
| 16690 | 528 | 480 | 504 | 288 | 312 | 2736 | 38 |
| 16692 | 480 | 528 | 456 | 336 | 288 | 2832 | 41 |
| 16693 | 528 | 528 | 456 | 432 | 312 | 2784 | 38 |
| 16695 | 480 | 552 | 456 | 408 | 288 | 2976 | 34 |
| 16696 | 480 | 480 | 480 | 288 | 288 | 2736 | 46 |
| 16697 | 480 | 480 | 480 | 264 | 264 | 2976 | 43 |
| 16698 | 336 | 504 | 456 | 312 | 240 | 2304 | 34 |
| 16699 | 504 | 480 | 456 | 288 | 264 | 3120 | 38 |
| 16701 | 432 | 456 | 504 | 264 | 288 | 2736 | 31 |
| 16706 | 456 | 528 | 432 | 360 | 264 | 2832 | 41 |
| 16707 | 504 | 504 | 456 | 384 | 288 | 2688 | 34 |
| **MEAN** | **474** | **507*** | **471** | **321** | **282** | **2829** | **38** |
| **SD** | **53.7** | **39.1** | **27.5** | **53.2** | **22.3** | **190.0** | **4.2** |

* **Significantly different from the control group value at $p \leq 0.05$**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.161 | 12.2 | 5.1 | 1128 | 1224 | 1296 | 1464 |
| 16617 | 1.084 | 12.1 | 5.2 | 1176 | 1200 | 1272 | 1296 |
| 16618 | 1.003 | 11.0 | 5.0 | 1080 | 1008 | 1224 | 1152 |
| 16619 | 1.111 | 12.0 | 4.7 | 1104 | 1152 | 1272 | 1296 |
| 16620 | 1.197 | 12.2 | 4.6 | 1008 | 1152 | 1200 | 1440 |
| 16621 | 1.023 | 11.6 | 4.9 | 1152 | 984 | 1200 | 1128 |
| 16623 | 1.128 | 12.0 | 4.7 | 1032 | 1224 | 1200 | 1320 |
| 16625 | 1.168 | 11.8 | 5.5 | 960 | 1032 | 1344 | 1272 |
| 16626 | 1.221 | 12.5 | 5.3 | 1344 | 1296 | 1416 | 1392 |
| 16629 | 1.136 | 12.1 | 5.2 | 984 | 1056 | 1320 | 1224 |
| 16630 | 1.275 | 12.3 | 4.8 | 1152 | 1176 | 1344 | 1368 |
| 16634 | 1.104 | 11.9 | 5.0 | 1032 | 1080 | 1296 | 1296 |
| 16636 | 0.988 | 11.8 | 4.8 | 1008 | 1056 | 1296 | ---- |
| 16637 | 0.859 | 10.8 | 4.2 | 984 | 960 | 1128 | 1056 |
| **MEAN** | **1.104** | **11.9** | **4.9** | **1082** | **1114** | **1272** | **1285** |
| **SD** | **0.108** | **0.5** | **0.3** | **103.7** | **103.0** | **75.3** | **120.6** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | 1.192 | 12.2 | 4.6 | 1344 | 1128 | 1464 | 1416 |
| 16709 | 1.136 | 12.0 | 4.8 | 1080 | 1008 | 1248 | 1176 |
| 16711 | 0.981 | 11.2 | 3.8 | 1056 | 1104 | 1272 | 1200 |
| 16712 | 1.215 | 12.2 | 5.0 | 1080 | 1224 | 1320 | 1488 |
| 16713 | 1.087 | 11.8 | 5.0 | 1128 | 1080 | 1224 | 1272 |
| 16715 | 1.174 | 12.2 | 5.2 | 1056 | 1296 | 1368 | 1368 |
| 16717 | 1.160 | 12.1 | 5.0 | 1224 | 1344 | 1392 | 1368 |
| 16718 | 1.048 | 12.1 | 4.5 | 984 | 960 | 1224 | 1080 |
| 16719 | 1.175 | 12.4 | 5.5 | 1080 | 984 | 1344 | 1248 |
| 16722 | 1.310 | 12.9 | 5.8 | 1248 | 1368 | 1464 | 1536 |
| 16723 | 1.238 | 12.7 | 5.2 | 1176 | 1224 | 1368 | 1296 |
| 16724 | 1.029 | 12.0 | 4.5 | 1032 | 1104 | 1176 | 1200 |
| 16725 | 1.023 | 11.8 | 5.2 | 1008 | 1008 | 1248 | 1248 |
| 16728 | 1.006 | 11.9 | 4.3 | 1224 | 1200 | 1368 | 1296 |
| 16730 | 1.447 | 12.7 | 5.8 | 1248 | 1296 | 1440 | 1392 |
| **MEAN** | **1.148** | **12.1** | **4.9** | **1131** | **1155** | **1328** | **1306** |
| **SD** | **0.126** | **0.4** | **0.6** | **106.1** | **134.8** | **92.4** | **123.0** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2400 | 2328 | 269 | 307 | 1104 | 1008 | 552 |
| 16617 | 1920 | 2016 | 307 | 288 | 864 | 888 | 432 |
| 16618 | ---- | 1872 | 336 | 307 | 840 | 888 | 432 |
| 16619 | 1920 | 1920 | 250 | 250 | 960 | 936 | 456 |
| 16620 | 1944 | 2040 | 288 | 403 | 912 | 960 | 480 |
| 16621 | 1920 | 1920 | 288 | 298 | 888 | 936 | 456 |
| 16623 | 1944 | 1992 | 384 | 413 | 888 | 1032 | 432 |
| 16625 | 2088 | 2040 | 298 | 288 | 960 | 888 | 432 |
| 16626 | 2088 | 2040 | 336 | 346 | 984 | 936 | 480 |
| 16629 | 2040 | 2016 | 346 | 298 | 888 | 936 | 360 |
| 16630 | 2160 | 2160 | 298 | 298 | 912 | 864 | 432 |
| 16634 | 1944 | 1944 | 317 | 346 | 1080 | 960 | 528 |
| 16636 | 1968 | 1992 | 278 | 250 | 888 | 912 | 432 |
| 16637 | 1680 | 1752 | - | 336 | 792 | 840 | 384 |
| **MEAN** | **2001** | **2002** | **307** | **316** | **926** | **927** | **449** |
| **SD** | **167.0** | **133.7** | **36.1** | **48.6** | **86.1** | **52.9** | **50.2** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | 2088 | 2088 | 288 | 278 | 1008 | 840 | 432 |
| 16709 | 1920 | 1920 | 307 | 288 | 936 | 960 | 432 |
| 16711 | 1920 | 1944 | 336 | 355 | 912 | 984 | 432 |
| 16712 | 2040 | 2040 | 326 | 336 | 1008 | 1032 | 504 |
| 16713 | 1992 | 1848 | 413 | 403 | 888 | 936 | 456 |
| 16715 | 1944 | 2040 | 288 | 307 | 936 | 744 | 408 |
| 16717 | 2184 | 1872 | 355 | 365 | 984 | 960 | 528 |
| 16718 | 1920 | 1920 | 413 | 355 | 912 | 936 | 384 |
| 16719 | 2160 | 2112 | 451 | 461 | 1056 | 960 | 528 |
| 16722 | 2208 | 2280 | 355 | 384 | 1104 | 1080 | 552 |
| 16723 | 2088 | 2112 | 259 | 259 | 888 | 1008 | 456 |
| 16724 | 2040 | 2160 | 336 | 336 | 960 | 936 | 456 |
| 16725 | 1920 | 1920 | 336 | 336 | 864 | 840 | 384 |
| 16728 | 1992 | 2184 | 384 | 403 | 888 | 960 | 456 |
| 16730 | 2160 | 2160 | 355 | 384 | 888 | 1056 | 432 |
| **MEAN** | **2038** | **2040** | **347** | **350** | **949** | **949** | **456** |
| **SD** | **104.8** | **130.2** | **52.2** | **53.6** | **70.2** | **87.4** | **51.3** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**Table 1**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 480 | 528 | 504 | 384 | 288 | 3072 | 29 |
| 16617 | 432 | 408 | 408 | 240 | 264 | 2736 | 31 |
| 16618 | 408 | 408 | 432 | 288 | 288 | 2736 | 29 |
| 16619 | 456 | 504 | 432 | 288 | 264 | 2928 | 36 |
| 16620 | 480 | 432 | 456 | 288 | 312 | 2880 | 34 |
| 16621 | 432 | 456 | 456 | 288 | 288 | 2592 | 41 |
| 16623 | 528 | 456 | 480 | 312 | 288 | 2976 | 34 |
| 16625 | 432 | 504 | 456 | 312 | 288 | 2928 | 36 |
| 16626 | 480 | 456 | 432 | 312 | 240 | 2976 | 36 |
| 16629 | 456 | 528 | 480 | 240 | 288 | 2880 | 46 |
| 16630 | 432 | 432 | 648 | 264 | 240 | 3024 | 41 |
| 16634 | 456 | 528 | 504 | 360 | 288 | 3024 | 38 |
| 16636 | 480 | 480 | 480 | 240 | 216 | 2496 | 36 |
| 16637 | 384 | 432 | 456 | 264 | 288 | 2256 | 38 |
| **MEAN** | **453** | **468** | **473** | **291** | **274** | **2822** | **36** |
| **SD** | **36.3** | **43.9** | **57.6** | **43.0** | **26.1** | **234.5** | **4.7** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | 384 | 504 | 456 | 288 | 264 | 2784 | 31 |
| 16709 | 480 | 480 | 456 | 312 | 312 | 2928 | 36 |
| 16711 | 432 | 504 | 528 | 288 | 312 | 2688 | 38 |
| 16712 | 528 | 528 | 480 | 336 | 336 | 3072 | 41 |
| 16713 | 480 | 432 | 456 | 288 | 288 | 2832 | 38 |
| 16715 | 336 | 552 | 384 | 264 | 216 | 2784 | 48 |
| 16717 | 528 | 456 | 456 | 312 | 312 | 3216 | 43 |
| 16718 | 456 | 504 | 504 | 264 | 360 | 2544 | 50 |
| 16719 | 480 | 504 | 456 | 360 | 312 | 2976 | 41 |
| 16722 | 552 | 576 | 552 | 360 | 312 | 3072 | 43 |
| 16723 | 552 | 432 | 432 | 264 | 312 | 3360 | 31 |
| 16724 | 480 | 528 | 432 | 312 | 288 | 2592 | 36 |
| 16725 | 360 | 480 | 480 | 264 | 288 | ---- | 36 |
| 16728 | 528 | 456 | 432 | 264 | 312 | 2496 | 43 |
| 16730 | 552 | 432 | 480 | 264 | 336 | 3552 | 38 |
| **MEAN** | **475** | **491** | **466** | **296** | **304*** | **2921** | **40** |
| **SD** | **70.4** | **44.3** | **41.4** | **34.7** | **33.5** | **311.0** | **5.4** |

*** Significantly different from the control group value at $p \leq 0.05$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.224 | 12.6 | 5.2 | 1320 | 1320 | 1488 | 1440 |
| 16617 | 1.145 | 12.2 | 5.3 | 1296 | 1176 | 1416 | 1416 |
| 16618 | 1.017 | 12.0 | 5.1 | 1080 | 1128 | 1296 | 1296 |
| 16619 | 1.107 | 12.1 | 5.0 | 1248 | 1248 | 1344 | 1296 |
| 16620 | 1.020 | 11.9 | 4.8 | 1056 | 1080 | 1272 | 1200 |
| 16621 | 1.016 | 11.5 | 5.0 | 1080 | 1176 | 1272 | 1272 |
| 16623 | 1.127 | 12.0 | 4.8 | 1080 | 1224 | 1344 | 1296 |
| 16625 | 1.125 | 12.2 | 5.5 | 1248 | 1296 | 1344 | 1344 |
| 16626 | 1.225 | 13.2 | 5.4 | 1296 | ---- | 1440 | 1320 |
| 16629 | 1.101 | 12.2 | 5.0 | 1128 | 1176 | 1392 | 1368 |
| 16630 | 1.252 | 12.8 | 5.5 | 1200 | 1248 | 1416 | 1488 |
| 16631 | 1.169 | 12.2 | 5.2 | 1080 | 1176 | 1536 | 1464 |
| 16634 | 1.061 | 11.8 | 4.8 | 1152 | 1176 | 1272 | 1320 |
| 16635 | 1.304 | 13.1 | 6.0 | 1008 | 1080 | 1296 | 1368 |
| 16636 | 0.940 | 11.5 | 4.9 | 912 | 864 | 1080 | 1152 |
| 16637 | 0.823 | 10.8 | 3.8 | 960 | 960 | 1104 | 1056 |
| **MEAN** | **1.104** | **12.1** | **5.1** | **1134** | **1155** | **1332** | **1319** |
| **SD** | **0.123** | **0.6** | **0.5** | **124.1** | **121.3** | **122.4** | **113.8** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 1.115 | 11.8 | 5.2 | 1200 | 1200 | 1440 | 1296 |
| 16641 | 1.237 | 12.2 | 5.5 | 1320 | 1128 | 1272 | 1368 |
| 16643 | 0.840 | 11.2 | 4.2 | 1176 | 1104 | 1224 | 1296 |
| 16644 | 0.900 | 11.0 | 4.5 | 1248 | 1296 | 1200 | 1272 |
| 16645 | 1.084 | 11.6 | 5.0 | 1248 | 1104 | 1320 | 1296 |
| 16646 | 1.224 | 12.5 | 5.2 | 1248 | 1248 | 1320 | 1344 |
| 16647 | 0.973 | 11.2 | 4.2 | 1008 | 1032 | 1248 | 1128 |
| 16649 | 0.991 | 11.8 | 4.2 | 1008 | 1032 | 1296 | 1272 |
| 16650 | 1.129 | 12.2 | 5.2 | 1224 | 1152 | 1440 | 1464 |
| 16651 | 1.163 | 12.2 | 5.5 | 1176 | 1176 | 1320 | 1320 |
| 16653 | 1.022 | 12.0 | 5.0 | 1104 | 1128 | 1296 | 1344 |
| 16654 | 1.012 | 12.0 | 4.7 | 1152 | 1200 | 1368 | 1320 |
| 16655 | 1.202 | 12.2 | 5.2 | 1392 | 1368 | 1608 | 1512 |
| 16656 | 1.020 | 11.8 | 5.5 | 1104 | 1128 | 1344 | 1368 |
| 16657 | 1.214 | 12.5 | 5.1 | 1104 | 1080 | 1296 | 1272 |
| 16659 | 0.875 | 11.0 | 4.2 | 1008 | 1032 | 1200 | 1224 |
| **MEAN** | **1.063** | **11.8** | **4.9** | **1170** | **1150** | **1325** | **1319** |
| **SD** | **0.128** | **0.5** | **0.5** | **111.4** | **95.4** | **103.8** | **88.7** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

## TABLE 2

### Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2040 | 2016 | 307 | 307 | 936 | 936 | 432 |
| 16617 | 1968 | 2088 | 317 | 336 | 912 | 888 | 456 |
| 16618 | 1872 | 2040 | 365 | 317 | ---- | ---- | ---- |
| 16619 | 1896 | 1896 | 240 | 240 | 1056 | 936 | 504 |
| 16620 | 1824 | 1872 | 346 | ---- | 840 | 864 | 384 |
| 16621 | 1848 | 1800 | 307 | 374 | 960 | 912 | 456 |
| 16623 | 2112 | 2016 | 384 | 365 | 912 | 912 | 408 |
| 16625 | 2040 | 1992 | 288 | 307 | 936 | 984 | 504 |
| 16626 | 2064 | 2040 | 326 | 298 | 1032 | 960 | 552 |
| 16629 | 2136 | 2064 | 384 | 384 | 1128 | 936 | 576 |
| 16630 | 2160 | 1992 | 307 | 365 | 1176 | 1008 | 576 |
| 16631 | 2040 | 2160 | 394 | 394 | 1008 | 960 | 456 |
| 16634 | 1944 | 1992 | 346 | 365 | 936 | 912 | 288 |
| 16635 | 2232 | 2040 | 298 | 298 | 1104 | 1080 | 528 |
| 16636 | 1872 | 1920 | 461 | 470 | 1080 | 1080 | 528 |
| 16637 | 1680 | 1728 | 336 | 326 | 936 | 840 | 432 |
| **MEAN** | **1983** | **1979** | **338** | **343** | **997** | **947** | **472** |
| **SD** | **145.8** | **110.5** | **51.9** | **54.2** | **95.5** | **69.0** | **78.4** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 2040 | 2040 | 317 | 317 | 1032 | 864 | 504 |
| 16641 | 2136 | 2040 | 326 | 307 | 888 | 936 | 408 |
| 16643 | 1752 | 1824 | 278 | 269 | 888 | 816 | 432 |
| 16644 | 1872 | 2040 | 346 | 307 | 1056 | 1056 | 576 |
| 16645 | 1968 | 1920 | 365 | 365 | 888 | 888 | 288 |
| 16646 | 1896 | 1920 | 298 | 269 | 912 | 936 | 456 |
| 16647 | 1800 | 1848 | 269 | 250 | 912 | 816 | 432 |
| 16649 | 1992 | 1824 | 336 | 374 | 960 | 912 | 480 |
| 16650 | 1848 | 1872 | 298 | 298 | 936 | 1008 | 480 |
| 16651 | 2088 | 2160 | 317 | 317 | 960 | 960 | 480 |
| 16653 | 1992 | 1872 | 192 | 192 | 1008 | 936 | 480 |
| 16654 | 1800 | 1896 | 317 | 317 | 840 | 936 | 432 |
| 16655 | 2160 | 2064 | 451 | 470 | 1080 | 840 | 504 |
| 16656 | 1824 | 1872 | 288 | 298 | 864 | 864 | 432 |
| 16657 | 2040 | 2088 | 365 | 326 | 1032 | 1032 | 552 |
| 16659 | 1680 | 1800 | 240 | 259 | 936 | 792 | 432 |
| **MEAN** | **1931** | **1942** | **313** | **308** | **950** | **912** | **460** |
| **SD** | **142.4** | **111.7** | **58.0** | **61.6** | **72.8** | **78.4** | **65.1** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**
**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 432 | 480 | 504 | 264 | 264 | 3312 | 38 |
| 16617 | 432 | 432 | 432 | 264 | 192 | 2880 | 31 |
| 16618 | ---- | ---- | ---- | ---- | ---- | 2832 | 46 |
| 16619 | 480 | 552 | 456 | 336 | 288 | 2928 | 43 |
| 16620 | 432 | 432 | 432 | 240 | 240 | 2640 | 36 |
| 16621 | 456 | 480 | 456 | 264 | 240 | 2400 | 36 |
| 16623 | 456 | 480 | 456 | 288 | 264 | 2832 | 38 |
| 16625 | 528 | 504 | 432 | 288 | 288 | 2976 | 36 |
| 16626 | 504 | 480 | 480 | 360 | 288 | 3024 | 38 |
| 16629 | 408 | 552 | 528 | 408 | 264 | 2976 | 36 |
| 16630 | 528 | 600 | 480 | 360 | 312 | 3120 | 41 |
| 16631 | 456 | 552 | 480 | 312 | 312 | 2880 | 41 |
| 16634 | 456 | 528 | 456 | 264 | 264 | 2688 | 38 |
| 16635 | 576 | 576 | 504 | 408 | 312 | 3120 | 48 |
| 16636 | 552 | 528 | 480 | 312 | 336 | 2592 | 38 |
| 16637 | 312 | 480 | 456 | 312 | 264 | 2208 | 34 |
| **MEAN** | **467** | **510** | **469** | **312** | **275** | **2838** | **39** |
| **SD** | **65.3** | **50.1** | **28.5** | **52.9** | **36.1** | **280.4** | **4.3** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16640 | 456 | 528 | 408 | 336 | 288 | 2832 | 36 |
| 16641 | 432 | 456 | 480 | 216 | 264 | 2592 | 34 |
| 16643 | 408 | 456 | 384 | 264 | 240 | 2304 | 24 |
| 16644 | 600 | 480 | 456 | 384 | 360 | 2304 | 38 |
| 16645 | 432 | 456 | 456 | 336 | 264 | 2640 | 29 |
| 16646 | 480 | 456 | 456 | 264 | 264 | 3024 | 26 |
| 16647 | 360 | 432 | 432 | 288 | 264 | 2448 | 38 |
| 16649 | 456 | 480 | 456 | 336 | 240 | 2448 | 29 |
| 16650 | 504 | 432 | 504 | 288 | 336 | 2688 | 36 |
| 16651 | 456 | 480 | 456 | 288 | 264 | 2880 | 29 |
| 16653 | 456 | 504 | 432 | 336 | 264 | 2640 | 26 |
| 16654 | 480 | 432 | 432 | 240 | 240 | 2544 | 36 |
| 16655 | 408 | 600 | 432 | 336 | 240 | 2976 | 29 |
| 16656 | 432 | 432 | 432 | 264 | 240 | ---- | 36 |
| 16657 | 552 | 480 | 480 | 312 | 312 | 3168 | 43 |
| 16659 | 384 | 480 | 408 | 312 | 264 | 2304 | 36 |
| **MEAN** | **456** | **474** | **444** | **300** | **272** | **2653** | **33**** |
| **SD** | **60.1** | **43.4** | **30.4** | **43.8** | **35.8** | **274.8** | **5.4** |

**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.224 | 12.6 | 5.2 | 1320 | 1320 | 1488 | 1440 |
| 16617 | 1.145 | 12.2 | 5.3 | 1296 | 1176 | 1416 | 1416 |
| 16618 | 1.017 | 12.0 | 5.1 | 1080 | 1128 | 1296 | 1296 |
| 16619 | 1.107 | 12.1 | 5.0 | 1248 | 1248 | 1344 | 1296 |
| 16620 | 1.020 | 11.9 | 4.8 | 1056 | 1080 | 1272 | 1200 |
| 16621 | 1.016 | 11.5 | 5.0 | 1080 | 1176 | 1272 | 1272 |
| 16623 | 1.127 | 12.0 | 4.8 | 1080 | 1224 | 1344 | 1296 |
| 16625 | 1.125 | 12.2 | 5.5 | 1248 | 1296 | 1344 | 1344 |
| 16626 | 1.225 | 13.2 | 5.4 | 1296 | ---- | 1440 | 1320 |
| 16629 | 1.101 | 12.2 | 5.0 | 1128 | 1176 | 1392 | 1368 |
| 16630 | 1.252 | 12.8 | 5.5 | 1200 | 1248 | 1416 | 1488 |
| 16631 | 1.169 | 12.2 | 5.2 | 1080 | 1176 | 1536 | 1464 |
| 16634 | 1.061 | 11.8 | 4.8 | 1152 | 1176 | 1272 | 1320 |
| 16635 | 1.304 | 13.1 | 6.0 | 1008 | 1080 | 1296 | 1368 |
| 16636 | 0.940 | 11.5 | 4.9 | 912 | 864 | 1080 | 1152 |
| 16637 | 0.823 | 10.8 | 3.8 | 960 | 960 | 1104 | 1056 |
| **MEAN** | **1.104** | **12.1** | **5.1** | **1134** | **1155** | **1332** | **1319** |
| **SD** | **0.123** | **0.6** | **0.5** | **124.1** | **121.3** | **122.4** | **113.8** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16662 | 1.132 | 12.2 | 5.3 | 1224 | 1224 | 1392 | 1248 |
| 16664 | 1.051 | 12.0 | 5.0 | 1176 | 1224 | 1368 | 1416 |
| 16665 | 0.988 | 11.8 | 5.0 | 1152 | 1224 | 1320 | 1320 |
| 16667 | 1.135 | 12.2 | 5.8 | 1200 | 1152 | 1392 | 1248 |
| 16668 | 1.245 | 12.5 | 5.0 | 1248 | 1512 | 1416 | 1536 |
| 16669 | 1.030 | 11.2 | 5.0 | 1080 | 1176 | 1296 | 1392 |
| 16670 | 0.988 | 11.8 | 4.7 | 1128 | 1104 | 1224 | 1224 |
| 16673 | 0.872 | 11.0 | 4.2 | 936 | 1008 | 1104 | 1152 |
| 16675 | 1.097 | 12.2 | 5.8 | 1224 | 1176 | 1320 | 1344 |
| 16676 | 0.765 | 11.5 | 4.6 | 936 | 1032 | 1152 | 1176 |
| 16678 | 1.032 | 11.5 | 5.0 | 1080 | 1056 | 1224 | 1200 |
| 16679 | 1.155 | 11.2 | 5.0 | 1224 | 1200 | 1224 | 1320 |
| 16680 | 1.027 | 11.3 | 4.8 | 1200 | 1008 | 1392 | 1296 |
| 16681 | 0.847 | 11.0 | 4.2 | 960 | 960 | 1248 | 1080 |
| 16683 | 0.873 | 11.8 | 4.7 | 1080 | 1080 | 1128 | 1152 |
| **MEAN** | **1.016** | **11.7** | **4.9** | **1123** | **1142** | **1280** | **1274** |
| **SD** | **0.131** | **0.5** | **0.5** | **108.2** | **135.4** | **102.9** | **119.1** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2040 | 2016 | 307 | 307 | 936 | 936 | 432 |
| 16617 | 1968 | 2088 | 317 | 336 | 912 | 888 | 456 |
| 16618 | 1872 | 2040 | 365 | 317 | ---- | ---- | ---- |
| 16619 | 1896 | 1896 | 240 | 240 | 1056 | 936 | 504 |
| 16620 | 1824 | 1872 | 346 | ---- | 840 | 864 | 384 |
| 16621 | 1848 | 1800 | 307 | 374 | 960 | 912 | 456 |
| 16623 | 2112 | 2016 | 384 | 365 | 912 | 912 | 408 |
| 16625 | 2040 | 1992 | 288 | 307 | 936 | 984 | 504 |
| 16626 | 2064 | 2040 | 326 | 298 | 1032 | 960 | 552 |
| 16629 | 2136 | 2064 | 384 | 384 | 1128 | 936 | 576 |
| 16630 | 2160 | 1992 | 307 | 365 | 1176 | 1008 | 576 |
| 16631 | 2040 | 2160 | 394 | 394 | 1008 | 960 | 456 |
| 16634 | 1944 | 1992 | 346 | 365 | 936 | 912 | 288 |
| 16635 | 2232 | 2040 | 298 | 298 | 1104 | 1080 | 528 |
| 16636 | 1872 | 1920 | 461 | 470 | 1080 | 1080 | 528 |
| 16637 | 1680 | 1728 | 336 | 326 | 936 | 840 | 432 |
| **MEAN** | **1983** | **1979** | **338** | **343** | **997** | **947** | **472** |
| **SD** | **145.8** | **110.5** | **51.9** | **54.2** | **95.5** | **69.0** | **78.4** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16662 | 1896 | 1896 | 259 | 259 | 936 | 984 | 480 |
| 16664 | 1872 | 1872 | 307 | 326 | 960 | 840 | 456 |
| 16665 | ---- | 1824 | 240 | 278 | ---- | 720 | ---- |
| 16667 | 2088 | 2064 | 250 | 250 | 912 | 816 | 456 |
| 16668 | 2136 | 2160 | 403 | 365 | 1080 | 960 | 528 |
| 16669 | 1824 | 1872 | 259 | 259 | 912 | 744 | 456 |
| 16670 | 1728 | 1872 | 336 | 336 | 936 | 840 | 456 |
| 16673 | 1776 | 1656 | 288 | 298 | 888 | 864 | 384 |
| 16675 | 2016 | 1944 | 278 | 288 | 864 | 984 | 432 |
| 16676 | 1608 | 1632 | 211 | 230 | 744 | 744 | 336 |
| 16678 | 1872 | 1872 | 336 | 336 | 912 | 888 | 432 |
| 16679 | 1824 | 1896 | 288 | 288 | 840 | 936 | 432 |
| 16680 | 1872 | 1944 | 346 | 336 | 864 | 912 | 432 |
| 16681 | 1776 | 1728 | 298 | 298 | ---- | ---- | ---- |
| 16683 | 1728 | 1656 | 240 | 240 | 792 | 792 | 360 |
| **MEAN** | **1858*** | **1859*** | **289** | **292** | **895*** | **859*** | **434** |
| **SD** | **143.9** | **147.1** | **50.3** | **40.6** | **82.2** | **89.4** | **50.4** |

* Significantly different from the control group value at $p \leq 0.05$
** Significantly different from the control group value at $p \leq 0.01$
The absence of a measurement indicates sub-optimal representation of the area in the sections.

## TABLE 2

### Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 432 | 480 | 504 | 264 | 264 | 3312 | 38 |
| 16617 | 432 | 432 | 432 | 264 | 192 | 2880 | 31 |
| 16618 | ---- | ---- | ---- | ---- | ---- | 2832 | 46 |
| 16619 | 480 | 552 | 456 | 336 | 288 | 2928 | 43 |
| 16620 | 432 | 432 | 432 | 240 | 240 | 2640 | 36 |
| 16621 | 456 | 480 | 456 | 264 | 240 | 2400 | 36 |
| 16623 | 456 | 480 | 456 | 288 | 264 | 2832 | 38 |
| 16625 | 528 | 504 | 432 | 288 | 288 | 2976 | 36 |
| 16626 | 504 | 480 | 480 | 360 | 288 | 3024 | 38 |
| 16629 | 408 | 552 | 528 | 408 | 264 | 2976 | 36 |
| 16630 | 528 | 600 | 480 | 360 | 312 | 3120 | 41 |
| 16631 | 456 | 552 | 480 | 312 | 312 | 2880 | 41 |
| 16634 | 456 | 528 | 456 | 264 | 264 | 2688 | 38 |
| 16635 | 576 | 576 | 504 | 408 | 312 | 3120 | 48 |
| 16636 | 552 | 528 | 480 | 312 | 336 | 2592 | 38 |
| 16637 | 312 | 480 | 456 | 312 | 264 | 2208 | 34 |
| **MEAN** | **467** | **510** | **469** | **312** | **275** | **2838** | **39** |
| **SD** | **65.3** | **50.1** | **28.5** | **52.9** | **36.1** | **280.4** | **4.3** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16662 | 552 | 456 | 432 | 288 | 360 | 2736 | 38 |
| 16664 | 432 | 504 | 432 | 312 | 240 | 2640 | 36 |
| 16665 | 312 | ---- | 432 | ---- | 192 | 2592 | 36 |
| 16667 | 384 | 456 | 432 | 288 | 240 | 3072 | 31 |
| 16668 | 528 | 552 | 480 | 408 | 288 | 2928 | 34 |
| 16669 | 360 | 456 | 384 | 264 | 240 | 2832 | 34 |
| 16670 | 408 | 480 | 408 | 288 | 240 | 2304 | 38 |
| 16673 | 456 | 456 | 432 | 336 | 264 | 2352 | 34 |
| 16675 | 528 | 408 | 456 | 264 | 312 | 2928 | 36 |
| 16676 | 384 | 408 | 360 | 216 | 216 | ---- | 31 |
| 16678 | 432 | 480 | 432 | 288 | 288 | 2736 | 36 |
| 16679 | 504 | 432 | 432 | 240 | 288 | 2880 | 38 |
| 16680 | 432 | 456 | 456 | 288 | 336 | 2448 | 29 |
| 16681 | ---- | ---- | ---- | ---- | ---- | 2208 | 34 |
| 16683 | 360 | 432 | 408 | 216 | 216 | 2208 | 34 |
| **MEAN** | **434** | **460**** | **427**** | **284** | **266** | **2633** | **35*** |
| **SD** | **72.6** | **39.0** | **30.0** | **50.8** | **48.4** | **287.3** | **2.7** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.224 | 12.6 | 5.2 | 1320 | 1320 | 1488 | 1440 |
| 16617 | 1.145 | 12.2 | 5.3 | 1296 | 1176 | 1416 | 1416 |
| 16618 | 1.017 | 12.0 | 5.1 | 1080 | 1128 | 1296 | 1296 |
| 16619 | 1.107 | 12.1 | 5.0 | 1248 | 1248 | 1344 | 1296 |
| 16620 | 1.020 | 11.9 | 4.8 | 1056 | 1080 | 1272 | 1200 |
| 16621 | 1.016 | 11.5 | 5.0 | 1080 | 1176 | 1272 | 1272 |
| 16623 | 1.127 | 12.0 | 4.8 | 1080 | 1224 | 1344 | 1296 |
| 16625 | 1.125 | 12.2 | 5.5 | 1248 | 1296 | 1344 | 1344 |
| 16626 | 1.225 | 13.2 | 5.4 | 1296 | ---- | 1440 | 1320 |
| 16629 | 1.101 | 12.2 | 5.0 | 1128 | 1176 | 1392 | 1368 |
| 16630 | 1.252 | 12.8 | 5.5 | 1200 | 1248 | 1416 | 1488 |
| 16631 | 1.169 | 12.2 | 5.2 | 1080 | 1176 | 1536 | 1464 |
| 16634 | 1.061 | 11.8 | 4.8 | 1152 | 1176 | 1272 | 1320 |
| 16635 | 1.304 | 13.1 | 6.0 | 1008 | 1080 | 1296 | 1368 |
| 16636 | 0.940 | 11.5 | 4.9 | 912 | 864 | 1080 | 1152 |
| 16637 | 0.823 | 10.8 | 3.8 | 960 | 960 | 1104 | 1056 |
| **MEAN** | **1.104** | **12.1** | **5.1** | **1134** | **1155** | **1332** | **1319** |
| **SD** | **0.123** | **0.6** | **0.5** | **124.1** | **121.3** | **122.4** | **113.8** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 1.104 | 12.2 | 5.2 | 1440 | 1368 | 1440 | 1368 |
| 16686 | 1.149 | 12.6 | 5.1 | 1200 | 1200 | 1440 | 1368 |
| 16688 | 0.908 | 11.8 | 4.3 | 1080 | 984 | 1272 | 1152 |
| 16689 | 1.175 | 12.1 | 5.1 | 1200 | 1080 | 1440 | 1440 |
| 16690 | 1.084 | 11.8 | 5.4 | 1320 | 1320 | 1512 | 1656 |
| 16692 | 1.006 | 11.8 | 5.0 | 1080 | 1080 | 1272 | 1344 |
| 16693 | 1.216 | 12.7 | 5.0 | 1392 | 1248 | 1536 | 1416 |
| 16695 | 1.163 | 12.5 | 4.7 | 1344 | 1392 | 1584 | 1536 |
| 16696 | 0.916 | 11.0 | 4.4 | 1152 | 1200 | 1224 | 1272 |
| 16697 | 1.215 | 12.2 | 5.3 | 1488 | 1488 | 1656 | 1632 |
| 16698 | 1.009 | 11.8 | 5.0 | 1176 | 1224 | 1368 | 1368 |
| 16699 | 1.236 | 12.7 | 5.4 | 1320 | 1296 | 1368 | 1464 |
| 16701 | 1.142 | 12.8 | 5.2 | 1320 | 1320 | 1320 | 1344 |
| 16706 | 0.992 | 11.4 | 4.2 | 1080 | 1224 | 1248 | 1368 |
| 16707 | 1.049 | 11.5 | 5.1 | 1320 | 1272 | 1320 | 1368 |
| **MEAN** | **1.091** | **12.1** | **5.0** | **1261*** | **1246** | **1400** | **1406** |
| **SD** | **0.107** | **0.5** | **0.4** | **132.7** | **130.3** | **130.1** | **128.9** |

*** Significantly different from the control group value at $p \leq 0.05$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

## TABLE 2

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2040 | 2016 | 307 | 307 | 936 | 936 | 432 |
| 16617 | 1968 | 2088 | 317 | 336 | 912 | 888 | 456 |
| 16618 | 1872 | 2040 | 365 | 317 | ---- | ---- | ---- |
| 16619 | 1896 | 1896 | 240 | 240 | 1056 | 936 | 504 |
| 16620 | 1824 | 1872 | 346 | ---- | 840 | 864 | 384 |
| 16621 | 1848 | 1800 | 307 | 374 | 960 | 912 | 456 |
| 16623 | 2112 | 2016 | 384 | 365 | 912 | 912 | 408 |
| 16625 | 2040 | 1992 | 288 | 307 | 936 | 984 | 504 |
| 16626 | 2064 | 2040 | 326 | 298 | 1032 | 960 | 552 |
| 16629 | 2136 | 2064 | 384 | 384 | 1128 | 936 | 576 |
| 16630 | 2160 | 1992 | 307 | 365 | 1176 | 1008 | 576 |
| 16631 | 2040 | 2160 | 394 | 394 | 1008 | 960 | 456 |
| 16634 | 1944 | 1992 | 346 | 365 | 936 | 912 | 288 |
| 16635 | 2232 | 2040 | 298 | 298 | 1104 | 1080 | 528 |
| 16636 | 1872 | 1920 | 461 | 470 | 1080 | 1080 | 528 |
| 16637 | 1680 | 1728 | 336 | 326 | 936 | 840 | 432 |
| **MEAN** | **1983** | **1979** | **338** | **343** | **997** | **947** | **472** |
| **SD** | **145.8** | **110.5** | **51.9** | **54.2** | **95.5** | **69.0** | **78.4** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 2160 | 2232 | 288 | 288 | 888 | 792 | 480 |
| 16686 | 2208 | 2160 | 461 | 470 | 1152 | 984 | 600 |
| 16688 | 1920 | 1800 | 278 | 269 | 960 | 888 | 480 |
| 16689 | 2232 | 2112 | 461 | 451 | 1080 | 1080 | 600 |
| 16690 | 2064 | 2160 | 317 | ---- | 1008 | 1032 | 480 |
| 16692 | 2040 | 1920 | 288 | 269 | 816 | 840 | 384 |
| 16693 | 2160 | 2160 | 278 | 278 | 1080 | 960 | 504 |
| 16695 | 2328 | 2280 | ---- | 269 | 864 | 816 | 432 |
| 16696 | 1848 | 1920 | 326 | 346 | 864 | 840 | 408 |
| 16697 | 2232 | 2304 | 422 | 413 | 960 | 1008 | 480 |
| 16698 | 1992 | 2040 | 269 | 288 | 960 | 864 | 456 |
| 16699 | 2136 | 2064 | 298 | 288 | 888 | 912 | 480 |
| 16701 | 1920 | 1920 | 317 | 307 | 888 | 840 | 480 |
| 16706 | 1920 | 1968 | 269 | 288 | 840 | 912 | 408 |
| 16707 | 1944 | 2016 | 307 | 307 | 936 | 888 | 504 |
| **MEAN** | **2074** | **2070** | **327** | **324** | **946** | **910** | **478** |
| **SD** | **145.9** | **147.8** | **68.5** | **69.5** | **98.0** | **85.3** | **61.2** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 432 | 480 | 504 | 264 | 264 | 3312 | 38 |
| 16617 | 432 | 432 | 432 | 264 | 192 | 2880 | 31 |
| 16618 | ---- | ---- | ---- | ---- | ---- | 2832 | 46 |
| 16619 | 480 | 552 | 456 | 336 | 288 | 2928 | 43 |
| 16620 | 432 | 432 | 432 | 240 | 240 | 2640 | 36 |
| 16621 | 456 | 480 | 456 | 264 | 240 | 2400 | 36 |
| 16623 | 456 | 480 | 456 | 288 | 264 | 2832 | 38 |
| 16625 | 528 | 504 | 432 | 288 | 288 | 2976 | 36 |
| 16626 | 504 | 480 | 480 | 360 | 288 | 3024 | 38 |
| 16629 | 408 | 552 | 528 | 408 | 264 | 2976 | 36 |
| 16630 | 528 | 600 | 480 | 360 | 312 | 3120 | 41 |
| 16631 | 456 | 552 | 480 | 312 | 312 | 2880 | 41 |
| 16634 | 456 | 528 | 456 | 264 | 264 | 2688 | 38 |
| 16635 | 576 | 576 | 504 | 408 | 312 | 3120 | 48 |
| 16636 | 552 | 528 | 480 | 312 | 336 | 2592 | 38 |
| 16637 | 312 | 480 | 456 | 312 | 264 | 2208 | 34 |
| **MEAN** | **467** | **510** | **469** | **312** | **275** | **2838** | **39** |
| **SD** | **65.3** | **50.1** | **28.5** | **52.9** | **36.1** | **280.4** | **4.3** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16685 | 480 | 408 | 384 | 264 | 336 | 3120 | 43 |
| 16686 | 456 | 528 | 480 | 432 | 288 | 2736 | 31 |
| 16688 | 480 | 456 | 432 | 288 | 288 | 2496 | 36 |
| 16689 | 504 | 480 | 480 | 336 | 336 | 2928 | 34 |
| 16690 | 528 | 504 | 456 | 312 | 288 | 2544 | 41 |
| 16692 | 408 | 432 | 408 | 240 | 240 | 2640 | 34 |
| 16693 | 480 | 576 | 456 | 360 | 240 | 2784 | 41 |
| 16695 | 456 | 456 | 408 | 240 | 264 | 2784 | 38 |
| 16696 | 408 | 456 | 408 | 288 | 240 | 2256 | 29 |
| 16697 | 576 | 480 | 432 | 288 | 288 | 3024 | 38 |
| 16698 | 408 | 504 | 480 | 312 | 240 | 2400 | 41 |
| 16699 | 456 | 432 | 456 | 240 | 264 | 2976 | 38 |
| 16701 | 408 | 432 | 432 | 264 | 240 | 2640 | 38 |
| 16706 | 480 | 480 | 432 | 264 | 216 | 2400 | 46 |
| 16707 | 456 | 408 | 408 | 240 | 240 | 2640 | 38 |
| **MEAN** | **466** | **469*** | **437*** | **291** | **267** | **2691** | **38** |
| **SD** | **47.8** | **46.1** | **30.4** | **53.6** | **36.1** | **250.4** | **4.5** |

*** Significantly different from the control group value at $p \leq 0.05$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 1.224 | 12.6 | 5.2 | 1320 | 1320 | 1488 | 1440 |
| 16617 | 1.145 | 12.2 | 5.3 | 1296 | 1176 | 1416 | 1416 |
| 16618 | 1.017 | 12.0 | 5.1 | 1080 | 1128 | 1296 | 1296 |
| 16619 | 1.107 | 12.1 | 5.0 | 1248 | 1248 | 1344 | 1296 |
| 16620 | 1.020 | 11.9 | 4.8 | 1056 | 1080 | 1272 | 1200 |
| 16621 | 1.016 | 11.5 | 5.0 | 1080 | 1176 | 1272 | 1272 |
| 16623 | 1.127 | 12.0 | 4.8 | 1080 | 1224 | 1344 | 1296 |
| 16625 | 1.125 | 12.2 | 5.5 | 1248 | 1296 | 1344 | 1344 |
| 16626 | 1.225 | 13.2 | 5.4 | 1296 | ---- | 1440 | 1320 |
| 16629 | 1.101 | 12.2 | 5.0 | 1128 | 1176 | 1392 | 1368 |
| 16630 | 1.252 | 12.8 | 5.5 | 1200 | 1248 | 1416 | 1488 |
| 16631 | 1.169 | 12.2 | 5.2 | 1080 | 1176 | 1536 | 1464 |
| 16634 | 1.061 | 11.8 | 4.8 | 1152 | 1176 | 1272 | 1320 |
| 16635 | 1.304 | 13.1 | 6.0 | 1008 | 1080 | 1296 | 1368 |
| 16636 | 0.940 | 11.5 | 4.9 | 912 | 864 | 1080 | 1152 |
| 16637 | 0.823 | 10.8 | 3.8 | 960 | 960 | 1104 | 1056 |
| **MEAN** | **1.104** | **12.1** | **5.1** | **1134** | **1155** | **1332** | **1319** |
| **SD** | **0.123** | **0.6** | **0.5** | **124.1** | **121.3** | **122.4** | **113.8** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | 1.120 | 12.2 | 4.8 | 1248 | 1296 | 1392 | 1392 |
| 16709 | 1.122 | 12.8 | 5.1 | 1224 | 1272 | 1248 | 1272 |
| 16711 | 0.857 | 11.0 | 4.5 | 936 | 1056 | 1104 | 1248 |
| 16712 | 1.151 | 12.0 | 5.0 | 1128 | 1248 | 1416 | 1416 |
| 16713 | 1.070 | 12.0 | 4.8 | 1176 | 1152 | 1464 | 1392 |
| 16715 | 1.092 | 12.0 | 5.0 | 1200 | 1272 | 1368 | 1344 |
| 16716 | 1.053 | 12.0 | 5.1 | 1128 | 1248 | 1392 | 1584 |
| 16717 | 1.096 | 12.0 | 5.1 | 1056 | 1248 | 1392 | 1392 |
| 16718 | 1.032 | 12.0 | 4.6 | 1128 | 1008 | 1248 | 1056 |
| 16719 | 1.120 | 12.6 | 4.8 | 1200 | 1320 | 1536 | 1440 |
| 16723 | 1.240 | 12.8 | 5.2 | 1224 | 1128 | 1440 | 1272 |
| 16724 | 0.995 | 12.0 | 4.3 | 1032 | 1032 | 1224 | 1152 |
| 16725 | 1.043 | 11.8 | 5.2 | 1200 | 1176 | 1272 | 1344 |
| 16728 | 0.986 | 11.8 | 4.8 | 984 | 1056 | 1200 | 1176 |
| 16730 | 1.243 | 12.8 | 5.2 | 1344 | 1440 | 1656 | 1560 |
| **MEAN** | **1.081** | **12.1** | **4.9** | **1147** | **1197** | **1357** | **1336** |
| **SD** | **0.097** | **0.5** | **0.3** | **108.2** | **123.6** | **142.5** | **144.5** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 2040 | 2016 | 307 | 307 | 936 | 936 | 432 |
| 16617 | 1968 | 2088 | 317 | 336 | 912 | 888 | 456 |
| 16618 | 1872 | 2040 | 365 | 317 | ---- | ---- | ---- |
| 16619 | 1896 | 1896 | 240 | 240 | 1056 | 936 | 504 |
| 16620 | 1824 | 1872 | 346 | ---- | 840 | 864 | 384 |
| 16621 | 1848 | 1800 | 307 | 374 | 960 | 912 | 456 |
| 16623 | 2112 | 2016 | 384 | 365 | 912 | 912 | 408 |
| 16625 | 2040 | 1992 | 288 | 307 | 936 | 984 | 504 |
| 16626 | 2064 | 2040 | 326 | 298 | 1032 | 960 | 552 |
| 16629 | 2136 | 2064 | 384 | 384 | 1128 | 936 | 576 |
| 16630 | 2160 | 1992 | 307 | 365 | 1176 | 1008 | 576 |
| 16631 | 2040 | 2160 | 394 | 394 | 1008 | 960 | 456 |
| 16634 | 1944 | 1992 | 346 | 365 | 936 | 912 | 288 |
| 16635 | 2232 | 2040 | 298 | 298 | 1104 | 1080 | 528 |
| 16636 | 1872 | 1920 | 461 | 470 | 1080 | 1080 | 528 |
| 16637 | 1680 | 1728 | 336 | 326 | 936 | 840 | 432 |
| **MEAN** | **1983** | **1979** | **338** | **343** | **997** | **947** | **472** |
| **SD** | **145.8** | **110.5** | **51.9** | **54.2** | **95.5** | **69.0** | **78.4** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | 1944 | 2136 | 288 | 269 | 888 | ---- | 408 |
| 16709 | 2088 | 2088 | 422 | 413 | 960 | 984 | 504 |
| 16711 | 1824 | 1848 | 317 | 298 | 936 | 840 | 408 |
| 16712 | 2040 | 2040 | 250 | 288 | 1104 | 936 | 576 |
| 16713 | 1992 | 2088 | 374 | 384 | 936 | 912 | 456 |
| 16715 | 2112 | 2112 | 240 | 288 | 936 | 840 | 480 |
| 16716 | 1944 | 2088 | 317 | 336 | 960 | 960 | 456 |
| 16717 | 2040 | 1944 | 173 | 173 | 936 | 864 | 456 |
| 16718 | 1968 | 2088 | 336 | 336 | 840 | 1008 | 384 |
| 16719 | 2088 | 1992 | 240 | 259 | 888 | 864 | 408 |
| 16723 | 1968 | 2232 | 259 | 259 | 1128 | 1104 | 576 |
| 16724 | 1944 | 1896 | 326 | 307 | 864 | 840 | 432 |
| 16725 | 1944 | 2040 | 298 | 288 | 888 | 936 | 408 |
| 16728 | 1968 | 2040 | 269 | 317 | 864 | 864 | 456 |
| 16730 | 2064 | 2040 | 259 | 259 | 936 | 960 | 456 |
| **MEAN** | **1995** | **2045** | **291** | **298** | **938** | **922** | **458** |
| **SD** | **76.4** | **96.1** | **61.1** | **56.9** | **81.4** | **77.5** | **57.7** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

## TABLE 2

**Brain Weights and Morphometry Data for F1 Generation Day 10 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16616 | 432 | 480 | 504 | 264 | 264 | 3312 | 38 |
| 16617 | 432 | 432 | 432 | 264 | 192 | 2880 | 31 |
| 16618 | ---- | ---- | ---- | ---- | ---- | 2832 | 46 |
| 16619 | 480 | 552 | 456 | 336 | 288 | 2928 | 43 |
| 16620 | 432 | 432 | 432 | 240 | 240 | 2640 | 36 |
| 16621 | 456 | 480 | 456 | 264 | 240 | 2400 | 36 |
| 16623 | 456 | 480 | 456 | 288 | 264 | 2832 | 38 |
| 16625 | 528 | 504 | 432 | 288 | 288 | 2976 | 36 |
| 16626 | 504 | 480 | 480 | 360 | 288 | 3024 | 38 |
| 16629 | 408 | 552 | 528 | 408 | 264 | 2976 | 36 |
| 16630 | 528 | 600 | 480 | 360 | 312 | 3120 | 41 |
| 16631 | 456 | 552 | 480 | 312 | 312 | 2880 | 41 |
| 16634 | 456 | 528 | 456 | 264 | 264 | 2688 | 38 |
| 16635 | 576 | 576 | 504 | 408 | 312 | 3120 | 48 |
| 16636 | 552 | 528 | 480 | 312 | 336 | 2592 | 38 |
| 16637 | 312 | 480 | 456 | 312 | 264 | 2208 | 34 |
| **MEAN** | **467** | **510** | **469** | **312** | **275** | **2838** | **39** |
| **SD** | **65.3** | **50.1** | **28.5** | **52.9** | **36.1** | **280.4** | **4.3** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | External Germinal Layer (μ) |
|---|---|---|---|---|---|---|---|
| 16708 | ---- | 456 | ---- | 264 | ---- | 3024 | 36 |
| 16709 | 480 | 456 | 504 | 336 | 312 | 2928 | 34 |
| 16711 | 360 | 528 | 456 | 240 | 240 | 2544 | 38 |
| 16712 | 480 | 504 | 432 | 384 | 264 | 3120 | 41 |
| 16713 | 456 | 480 | 456 | 288 | 264 | 2688 | 41 |
| 16715 | 408 | 456 | 432 | 288 | 264 | 3216 | 34 |
| 16716 | 480 | 456 | 480 | 312 | 336 | 2784 | 36 |
| 16717 | 456 | 480 | 408 | 312 | 264 | 2784 | 41 |
| 16718 | 480 | 456 | 504 | 240 | 360 | 2640 | 34 |
| 16719 | 408 | 480 | 432 | 264 | 240 | 2640 | 36 |
| 16723 | 600 | 552 | 504 | 408 | 408 | 3312 | 34 |
| 16724 | 408 | 432 | 432 | 264 | 240 | 2688 | 41 |
| 16725 | 480 | 480 | 432 | 240 | 240 | 2736 | 38 |
| 16728 | 480 | 432 | 384 | 240 | 264 | 2496 | 29 |
| 16730 | 480 | 480 | 480 | 288 | 264 | 3120 | 36 |
| **MEAN** | **461** | **475** | **453** | **291** | **283** | **2848** | **36** |
| **SD** | **55.8** | **33.0** | **37.5** | **52.0** | **51.7** | **255.1** | **3.5** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Male Rats

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 14 | 0 | 0 | 0 | 15 |
| Olfactory Bulb | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Piriform Cortex | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Frontal Cortex | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Cingulate Cortex | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Septal Nuclei | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Anterior Commissure | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Parietal Cortex | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Caudate Nucleus/Putamen | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Globus Pallidus | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Optic Nerve/Chiasm | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Male Rats

| | GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 14 | 0 | 0 | 0 | 15 |
| Corpus Callosum | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 13 | - | - | - | 14 |
| No. With Microscopic Diagnoses | | 1 | - | - | - | 1 |
| VESICULATION | | 1 | - | - | - | 1 |
| | mild | 1 | - | - | - | 1 |
| External Capsule | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 11 | - | - | - | 13 |
| No. With Microscopic Diagnoses | | 3 | - | - | - | 2 |
| VESICULATION | | 3 | - | - | - | 2 |
| | minimal | 2 | - | - | - | 2 |
| | moderate | 1 | - | - | - | - |
| Internal Capsule | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Amygdala | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Retrosplenial Cortex | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Subiculum | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Hippocampus, CA1 | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Male Rats

| GROUP: | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 14 | 0 | 0 | 0 | 15 |
| Hippocampus, CA2 | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Hippocampus, CA3 | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Polymorphous Layer, Hipp | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Dentate Gyrus | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Thalamus | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 3 | - | - | - | 2 |
| No. With Microscopic Diagnoses | | 11 | - | - | - | 13 |
| PARA-VENTRICULAR VESICULATION | | 11 | - | - | - | 13 |
| | minimal | - | - | - | - | 1 |
| | mild | 11 | - | - | - | 12 |
| Hypothalamus | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Temporal Cortex | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Occipital Cortex | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Male Rats

| | GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 14 | 0 | 0 | 0 | 15 |
| Midbrain | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 10 | - | - | - | 9 |
| No. With Microscopic Diagnoses | | 4 | - | - | - | 6 |
| PERI-ACQUEDUCTAL VESICULATION | | 4 | - | - | - | 6 |
| | minimal | 1 | - | - | - | 2 |
| | mild | 3 | - | - | - | 4 |
| Entorhinal Cortex | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Cerebellar Cortex | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Cerebellar nuclei | | | | | | |
| Number of Tissues Examined | | 5 | 0 | 0 | 0 | 9 |
| No. With Microscopic Diagnoses | | 5 | - | - | - | 9 |
| VESICULATION | | 5 | - | - | - | 9 |
| | minimal | 2 | - | - | - | 1 |
| | mild | 3 | - | - | - | 8 |
| Cerebellar White Matter | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 15 |
| Pons | | | | | | |
| Number of Tissues Examined | | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 0 | - | - | - | 3 |
| No. With Microscopic Diagnoses | | 14 | - | - | - | 12 |
| SUBEPENDYMAL VESICULATION | | 14 | - | - | - | 12 |
| | minimal | 2 | - | - | - | - |
| | mild | 12 | - | - | - | 12 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Male Rats

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 14 | 0 | 0 | 0 | 15 |
| Vestibular Nucleus | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |
| Medulla Oblongata | | | | | |
| Number of Tissues Examined | 14 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 14 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 4

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Female Rats

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 15 |
| Olfactory Bulb | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Piriform Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Frontal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Cingulate Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Septal Nuclei | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Anterior Commissure | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Parietal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Caudate Nucleus/Putamen | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Globus Pallidus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Optic Nerve/Chiasm | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 4

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Female Rats

| GROUP: | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 16 | 0 | 0 | 0 | 15 |
| Corpus Callosum | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 15 | - | - | - | 15 |
| No. With Microscopic Diagnoses | | 1 | - | - | - | 0 |
| VESICULATION | | 1 | - | - | - | 0 |
| | mild | 1 | - | - | - | - |
| External Capsule | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 14 | - | - | - | 14 |
| No. With Microscopic Diagnoses | | 2 | - | - | - | 1 |
| VESICULATION | | 2 | - | - | - | 1 |
| | minimal | 2 | - | - | - | 1 |
| Internal Capsule | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Amygdala | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Retrosplenial Cortex | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Subiculum | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Hippocampus, CA1 | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 4

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Female Rats

| | GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 16 | 0 | 0 | 0 | 15 |
| Hippocampus, CA2 | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Hippocampus, CA3 | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Polymorphous Layer, Hipp | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Dentate Gyrus | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Thalamus | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 4 | - | - | - | 1 |
| No. With Microscopic Diagnoses | | 12 | - | - | - | 14 |
| PARA-VENTRICULAR VESICULATION | | 12 | - | - | - | 14 |
| | minimal | 1 | - | - | - | - |
| | mild | 11 | - | - | - | 14 |
| Hypothalamus | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Temporal Cortex | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Occipital Cortex | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 4

### Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Female Rats

| | GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Number of animals included | | 16 | 0 | 0 | 0 | 15 |
| Midbrain | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 11 | - | - | - | 11 |
| No. With Microscopic Diagnoses | | 5 | - | - | - | 4 |
| PERI-ACQUEDUCTAL VESICULATION | | 5 | - | - | - | 4 |
| | minimal | 2 | - | - | - | 1 |
| | mild | 3 | - | - | - | 3 |
| Entorhinal Cortex | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Cerebellar Cortex | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Cerebellar nuclei | | | | | | |
| Number of Tissues Examined | | 9 | 0 | 0 | 0 | 9 |
| No. With Microscopic Diagnoses | | 9 | - | - | - | 9 |
| VESICULATION | | 9 | - | - | - | 9 |
| | minimal | 3 | - | - | - | 1 |
| | mild | 6 | - | - | - | 8 |
| Cerebellar White Matter | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 16 | - | - | - | 15 |
| Pons | | | | | | |
| Number of Tissues Examined | | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | | 3 | - | - | - | 4 |
| No. With Microscopic Diagnoses | | 13 | - | - | - | 11 |
| SUBEPENDYMAL VESICULATION | | 13 | - | - | - | 11 |
| | minimal | 5 | - | - | - | - |
| | mild | 8 | - | - | - | 11 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 4**

**Neuropathology Summary Data for $F_1$ Generation Day 10 Postpartum Female Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 15 |
| Vestibular Nucleus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |
| Medulla Oblongata | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 15 |
| Microscopically Normal | 16 | - | - | - | 15 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16616M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|

Corpus Callosum (microscopic)
VESICULATION, focal, mild
Comment: The focus of vesiculation actually involves the hippocampal commissure just below the corpus callosum on the left side of the brain.

Pons (microscopic)
SUBEPENDYMAL VESICULATION, multifocal, mild

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | External Capsule | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Thalamus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16617M DATE OF DEATH:15-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|

Thalamus (microscopic)
PARA-VENTRICULAR VESICULATION, focal, mild
Comment: At dorsal tip of third ventricle.

Pons (microscopic)
SUBEPENDYMAL VESICULATION, multifocal, mild

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16618M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

ANIMAL ID: 16619M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| VESICULATION, focal, moderate | | |
| Comment: Adjacent to hippocampus and amygdala; unilateral. | | |
| Thalamus (microscopic) | | |
| PARA-VENTRICULAR VESICULATION, focal, mild | | |
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Midbrain |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16620M DATE OF DEATH:15-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16621M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16623M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16625M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16626M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16629M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16630M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, multifocal, minimal | |
| | Comment: Adjacent to the anterior commissure. | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Midbrain |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16634M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16636M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16637M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, focal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16708M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| | Comment: Unilateral. | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Pons | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16709M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16711M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Pons | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16712M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, focal, minimal | |
| | Comment: Adjacent to the anterior commissure on the right side. | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16713M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16715M DATE OF DEATH:15-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16717M DATE OF DEATH:18-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16718M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16719M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16722M DATE OF DEATH:15-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16723M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| VESICULATION, multifocal, minimal | | |
| Comment: Adjacent to the anterior commissure. | | |
| Thalamus (microscopic) | | |
| PARA-VENTRICULAR VESICULATION, focal, mild | | |
| Cerebellar nuclei (microscopic) | | |
| VESICULATION, multifocal, mild | | |
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Midbrain |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16724M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| PARA-VENTRICULAR VESICULATION, focal, minimal | | |
| Cerebellar nuclei (microscopic) | | |
| VESICULATION, focal, mild | | |
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16725M DATE OF DEATH:17-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16728M DATE OF DEATH:16-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Corpus Callosum (microscopic) | | |
| | VESICULATION, focal, mild | |
| | Comment: Splenium; Level 3 section. | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | External Capsule | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Thalamus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16730M DATE OF DEATH:22-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| PARA-VENTRICULAR VESICULATION, focal, mild | | |
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16616F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16617F DATE OF DEATH:15-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16618F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Cerebellar nuclei (microscopic) | | |
| VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Pons |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16619F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| PARA-VENTRICULAR VESICULATION, focal, mild | | |
| Pons (microscopic) | | |
| SUBEPENDYMAL VESICULATION, multifocal, mild | | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16620F DATE OF DEATH:15-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Midbrain |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16621F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, focal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16623F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, focal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16625F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

**TABLE 6**

**Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16626F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, minimal | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16629F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16630F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

ANIMAL ID: 16631F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16634F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Pons |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16635F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|

Corpus Callosum (microscopic)
VESICULATION, focal, mild
Comment: Splenium; Level 3.
Thalamus (microscopic)
PARA-VENTRICULAR VESICULATION, focal, mild
Midbrain (microscopic)
PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal
Cerebellar nuclei (microscopic)
VESICULATION, focal, mild
Pons (microscopic)
SUBEPENDYMAL VESICULATION, multifocal, mild

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | External Capsule | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16636F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16637F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16708F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | | |

ANIMAL ID: 16709F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16711F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16712F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16713F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| External Capsule (microscopic) | | |
| | VESICULATION, multifocal, minimal | |
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | Internal Capsule |
| Amygdala | Retrosplenial Cortex | Subiculum |
| Hippocampus, CA1 | Hippocampus, CA2 | Hippocampus, CA3 |
| Polymorphous Layer, Hipp | Dentate Gyrus | Hypothalamus |
| Temporal Cortex | Occipital Cortex | Midbrain |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Pons | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16715F DATE OF DEATH:15-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16716F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Cerebellar Cortex | Cerebellar White Matter | Pons |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16717F DATE OF DEATH:18-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, minimal | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16718F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

ANIMAL ID: 16719F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16723F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16724F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16725F DATE OF DEATH:17-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Vestibular Nucleus | Medulla Oblongata |

ANIMAL ID: 16728F DATE OF DEATH:16-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Midbrain | Entorhinal Cortex | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | | |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 10 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16730F DATE OF DEATH:22-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| Thalamus (microscopic) | | |
| | PARA-VENTRICULAR VESICULATION, focal, mild | |
| Midbrain (microscopic) | | |
| | PERI-ACQUEDUCTAL VESICULATION, multifocal, mild | |
| Cerebellar nuclei (microscopic) | | |
| | VESICULATION, focal, minimal | |
| Pons (microscopic) | | |
| | SUBEPENDYMAL VESICULATION, multifocal, mild | |

The following tissues/anatomic sites are microscopically normal:

| | | |
|---|---|---|
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Hypothalamus | Temporal Cortex | Occipital Cortex |
| Entorhinal Cortex | Cerebellar Cortex | Cerebellar White Matter |
| Vestibular Nucleus | Medulla Oblongata | |

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

**Neuropathology Report on $F_1$ Generation Day 10 Postpartum Rats**

## QUALITY ASSURANCE STATEMENT

Consultant Pathologist: Robert H. Garman, DVM

The following internal inspections were conducted to assure procedural quality and accuracy of data handling and reporting of results:

| Inspection | Dates Performed |
|---|---|
| 1. Accuracy of Micro slide labeling: | 11/30/00 |
| 2. Quality of Micro slide preparations: | 11/30/00 |
| 3. Comparison of Micro slides and corresponding blocks: | 11/30/00 |

In addition, the following inspections were conducted by an independent Quality Assurance Monitor, and the results of these inspections were reported to the Pathologist and to the Study Director:

| Inspections Performed | Dates Performed and Reported to Pathologist | Date Reported To Study Director |
|---|---|---|
| 1. Records of the above internal inspections: | 12/1,6,9,16/00 | 1/22/01 |
| 2. Raw data, final report: | 12/1,6,9,16/00 | 1/2201 |
| 3. Revised final report: | 1/21/01, 2/24/01, 3/03/01, & 3/10/01 | 1/22/01, 2/26/01, 3/06/01, & 3/12/01 |

Denise L Fait 3/10/01

Denise L. Fait, B.S. Date
Quality Assurance Consultant

CONSULTANTS IN VETERINARY PATHOLOGY

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# NEUROPATHOLOGY REPORT

## PROTOCOL 1416-003

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

**Neuropathology Report on $F_1$ Generation Day 22 Postpartum Rats**

TESTING FACILITY

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(80 Pages)

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## STATEMENT OF COMPLIANCE

Those portions of this study which were performed at the laboratories of Consultants in Veterinary Pathology, Inc. and at Experimental Pathology Laboratories, Inc. were conducted in compliance with the appropriate sections of the following Regulatory Citations:

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines.* OPPTS 870.3700: Prenatal developmental neurotoxicity study. August, 1998.

U.S. Environmental Protection Agency (1998). Office of Prevention, Pesticides and Toxic Substances (OPPTS). *Health Effects Test Guidelines.* OPPTS 870.3800: Reproductive and fertility effects. August, 1998.

U.S. Environmental Protection Agency. Toxic Substances Control Act (TSCA); Good Laboratory Practice Standards; Final Rule. 40 CFR Part 792.

## PROTOCOL DEVIATION

In the pathology supplement to the Protocol for this study, it is stated that the brain images would be captured at a resolution of 2700 dpi. It was discovered, after scanning, that some of the images had been captured, instead, at the scanner's default setting of 1350 dpi. This is not considered to have any impact on this study, because the sections can always be re-scanned later if resolution should prove to be sub-optimal for direct measuring of the digital images.

## NOTE ON STATISTICAL EVALUATIONS

Initial statistical evaluation of the morphometry data generated in this study consisted of a single factor ANOVA performed using an Excel® spreadsheet (results not included in this report). Subsequently, these data were analyzed at the Syracuse Research Corporation using Version 8 of SAS.® Verification of the statistical data was accomplished by: 1) comparing these data to the in-house results of the single factor ANOVA and 2) by comparing the hard copy print-outs from the Syracuse Research Corporation with those in the tables in this report. The statistical data could not otherwise be validated, because CVP, Inc. does not have the SAS software used by the Syracuse Research Corporation.

3-13-01

Robert H. Garman, DVM Date
Consultants In Veterinary Pathology, Inc.

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

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## SUMMARY

$F_1$ generation rats had been exposed to the test substance *in utero* and potentially *via* lactation. The female parental rats had received the test substance in their drinking water beginning 14 days before cohabitation and continuing throughout gestation and lactation. The parental females had received sufficient concentrations of the test substance in their drinking water to achieve the following target dosages: Group I (0 mg/kg/day); Group II (0.01 mg/kg/day); Group III (0.1 mg/kg/day); Group IV (1.0 mg/kg/day); Group V (30.0 mg/kg/day). Multiple sections of brain were examined microscopically from day 22 postpartum $F_1$ generation rats, with between 15 and 16 rat brains being examined from each of the dose groups. In addition, twenty-one linear measurements (two gross and 19 microscopic) were taken from each brain.

There were no treatment-related neuropathologic findings, and the brains of the rats in the maternal high dose groups were similar in microscopic appearance to those of the control groups. However, numerous statistically significant differences were noted for some of the morphometric data points when comparing the test substance-treated rat groups to their comparable control groups. The statistically significant data points did not, for the most part, appear to represent random excursions/false positives, because most were associated with numerical trends of similar direction in other treatment groups for which the data may have lacked statistical significance. For the male rats, there was a trend for increased linear dimensions in a number of brain regions, especially for the posterior level of the corpus callosum and, to a lesser extent, for certain hippocampal and cortical thickness measures. For the female rats, on the other hand, the pattern was reversed. The female data was more variable between groups, with some dimensions being of lesser value and some of greater value than for the female control group. However, for both the male and female rat groups, the means of the full thickness of the cerebellum were found to be thicker for all of the test substance-exposed groups than for the comparable control group. These increases were statistically significant for the Group II, III, and IV test substance-treated males, as well as for the Group II and Group IV females.

The pattern of inter-group differences seen in the morphometric parameters for the postpartum day 22 rats are similar to those encountered with the postpartum day 10 rats present on this study, even though the slides of brain tissue from the rats of these two ages were produced at two different histology laboratories. At both age points, the male rat brains tended to have a number of neuroanatomic regions that were thicker than similar regions in control group brains, while the reverse trend was present for the females. No effect was seen on the thickness/height of the cerebellum at day 10, however. These data suggest not only a treatment-related effect on brain development but that there may also be some degree of sexual dimorphism regarding response of rats to the test substance. Although this study lacks

a no-effect-level for the linear morphometric measures, there is also no evidence of a clear-cut dose response relationship *re:* the degrees of deviation of the linear measures from control group values.

## INTRODUCTION

The purpose of the neuropathology component of this study was to provide additional neuro-histologic morphometric data that could potentially be correlated with thyroid hormone data and histologic thyroid changes present within the same experimental population. The female parental rats had received the test substance in their drinking water beginning 14 days before cohabitation and continuing throughout gestation and lactation. The in-life portion of the study had been conducted at Argus Research Laboratories, Inc. The brains from the postpartum day 22 rats were trimmed and processed at Experimental Pathology Laboratories, Inc. The slides were then sent to Consultants in Veterinary Pathology, Inc. for evaluation and morphometry. This report presents the methodologies and the results of the evaluations performed on the postpartum day 22 rats.

## MATERIALS AND METHODS

### Animals and Study Overview

Crl:CD®(SD)IGS BR VAF/Plus® rats originating from Charles River Laboratories, Inc. were used for this study. The parental generation female rats had continual access to the test substance in the drinking water beginning 14 days before cohabitation and continuing through the day before sacrifice. There were five dosage groups, with these groups having the following target dosages: 0, 0.01, 0.1, 1.0, and 30.0 mg/kg/day. Necropsies were performed on rats at four age points, these being gestational age 21 and postpartum days 5, 10, and 22. This report presents the findings for the postpartum day 22 rats.

### Dissection and Weighing of Brains

The $F_1$ generation pups selected for evaluation at day 22 postpartum had been sacrificed by carbon dioxide asphyxiation. The heads of each of the pups selected for neuro-histologic evaluation had been severed just behind the back of the skull. The calvaria had then been removed from the top of each skull and the entire heads immersed in 10% neutral buffered formalin. These heads were subsequently received at Experimental Pathology Laboratories, Inc. (EPL) where the brains were removed and weighed. After the brains had been removed from the cranial vaults and weighed, two linear gross measurements were taken (see below). Between 15 and 16 brains were processed for examination from each of the five male and female dose groups.

Prior to slicing the brains for histologic processing, a Vernier caliper was used to obtain two anterior to posterior linear measurements from each brain as follows:

1) Anterior to posterior (AP) length of the cerebrum, extending from the anterior pole to the posterior pole, exclusive of the olfactory bulbs.

2) Anterior to posterior (AP) length of the cerebellum, extending from the anterior edge of the cerebellar cortex to the posterior pole (posterior edge of the cerebellar uvula). This measurement was made on a diagonal.

These gross measurements were performed in a "blinded" manner, with the individual performing the measurements being unaware of the dose group assignments.

After the gross measurements were taken, the day 22 postpartum pup brains were divided into six coronal sections as listed below.

Cut #1 - Half-way between the ventral base of the olfactory bulbs and the optic chiasm.
Cut #2 - Just anterior to the optic chiasm.
Cut #3 - Just anterior to the infundibulum.
Cut #4 - Through the midbrain at the level of the mammillary body.
Cut #5 - Through the cerebellum just anterior to its midpoint.
Cut #6 - Through the anterior portion of the medulla.

Cut #1 through Cut #4 were made from the ventral aspect of the brain, while Cuts #5 and #6 were made from the dorsal aspect of the brain. The olfactory bulbs were also processed, resulting in approximately eight slices from each brain. For all sections other than for the olfactory bulbs, the anterior face of each section was placed down into the tissue cassette (thus representing the face that was subsequently sectioned with the microtome). Each brain slice was approximately 2 mm in thickness.

The slice containing the optic chiasm was placed into Cassette No. 1. The slice that included the infundibulum was placed into Cassette No. 2. The slice through the mammillary body was placed in Cassette No. 3. The slice through the middle of the cerebellum was placed into Cassette No. 4. All of the remaining pieces of brain were placed into Cassette No. 5.

Histotechnology Procedures

The brain sections were processed according to the Standard Operating Procedures for paraffin embedding. The tissue blocks were then sectioned on a rotary microtome set at a thickness of five micrometers and the resulting sections stained with hematoxylin and eosin (H&E) and/or with luxol fast blue/cresyl violet (LFB/CV). [Slides No. 1 through 4 from control and high dose group brains received both stains. Sections of brains from rats in the three intermediate dose groups that were to be evaluated morphometrically were stained only with LFB/CV. Other brain sections were stained with H&E.] The blocks representing cassettes No. 1 through 4 were step-sectioned and, for most animals,

three sections from each block were placed on each slide. Duplicate slides are present for many animals. For Cassette No. 5, only one section was usually prepared. After evaluation of the slides by the study pathologist, recuts were requested (from EPL) from those blocks for which the sections were deemed to be too far anterior to be homologous. These additional sections were stained with LFB/CV, and all morphometric measurements were performed on the LFB/CV-stained sections.

Histopathology Procedures

Morphometry

Twenty-one linear morphometric measurements (two gross and 19 microscopic) were taken from each of the examined day 22 rat brains. Two of the measurements were taken from the intact brains prior to trimming and processing, as elaborated above. The other 19 measurements were taken from the histologic sections. (Note that 18 of these microscopic measurements actually represent nine regions measured bilaterally.) The microscopic morphometric measurements, listed below, were taken with a calibrated, ocular micrometer. (See also Figures 1 – 3).

1) Thickness of the frontal cortex. This measurement, taken bilaterally, was of the dorsal portion of the cerebral cortex within the coronal section passing through the region of the optic chiasm (Figure 1).
2) Thickness of the parietal cortex. This measurement, taken bilaterally, was of the dorsolateral portion of the cerebral cortex within the coronal section passing through the region of the optic chiasm (Figure 1).
3) Diagonal (maximal) dimension, taken bilaterally, of the striatum and underlying globus pallidus, but not including the underlying nucleus accumbens (Figure 1).
4) Thickness of the corpus callosum, taken bilaterally, within the coronal section passing through the region of the optic chiasm (Figure 1). This measurement was taken at the level of the external granular layer of the overlying cingulate gyrus.
5) Thickness of the corpus callosum, taken bilaterally, within the coronal section passing through the infundibulum (Figure 2). This measurement was also taken at the level of the external granular layer of the overlying cingulate gyrus.
6) Thickness of the hippocampal gyrus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
7) Thickness of the dentate gyrus of the hippocampus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
8) Thickness of the CA1 portion of the hippocampus. This measurement, taken bilaterally, was performed on the dorsal portion of the hippocampus within the section taken at the level of the infundibulum (Figure 2).
9) Thickness of the CA3 portion of the hippocampus. This measurement, taken bilaterally, was of the distance between the alveus and the dorsal blade of the dentate (Figure 2).
10) Maximum height of the cerebellum at the level of the deep cerebellar nuclei, extending from the roof of the fourth ventricle to the dorsal surface (Figure 3).

## *Figures*

**Figure 1** – Coronal section (level 1) taken at the level of the optic chiasm showing the areas measured for the frontal cortex, parietal cortex, striatum, and corpus callosum. (LFB/CV stain)

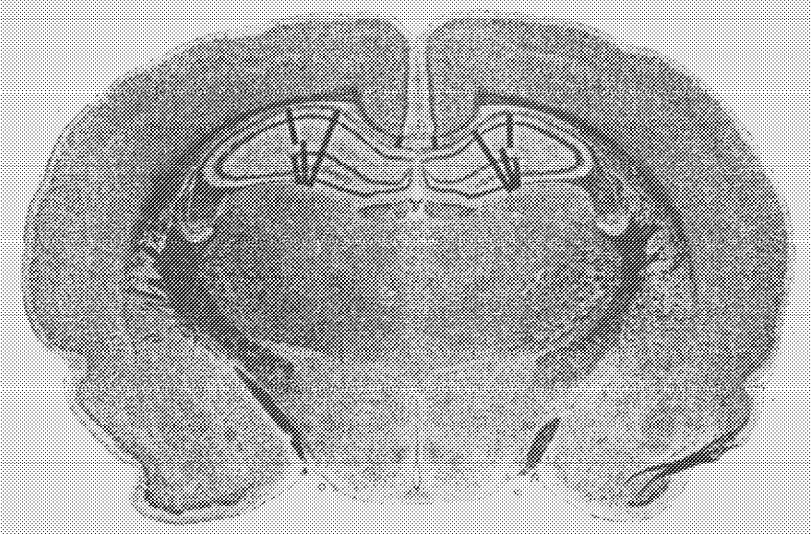

**Figure 2** – Coronal section (level 2) taken at the level of the infundibulum and showing the regions measured for the hippocampus and corpus callosum. From medial to lateral, the hippocampal measures are of its full thickness, the dentate gyrus, the CA1 layer, and the CA3 layer. (LFB/CV stain)

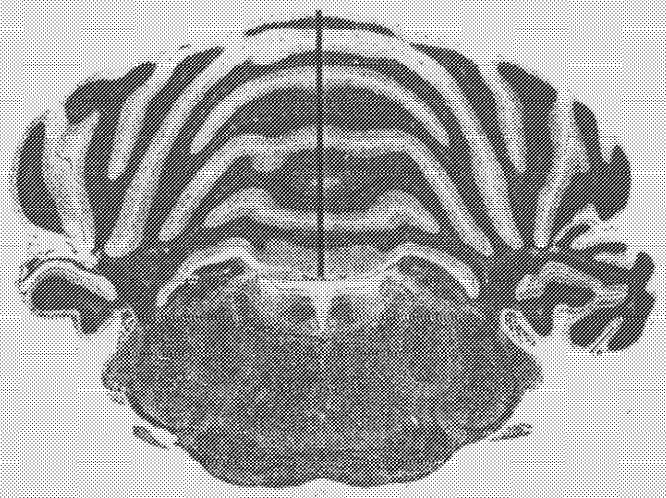

**Figure 3** – Coronal section (level 4) taken just anterior to the middle of the cerebellum. The superimposed line represents the full-thickness measurement of the cerebellar cortex. (LFB/CV stain)

All of the morphometric measurements were taken by the study pathologist using a calibrated ocular micrometer. An indelible ink drop was place on the microslides adjacent to each measured section and the measured sections digitally scanned using a PathScan Enabler™ and a Polaroid SprintScan 35® film scanner. These sections were scanned at a resolution of either 1350 or 2700 dpi, using a pre-scanning calibrated frame to standardize the image size. The digital images were saved in "TIFF" format, and these images then transferred to CD-R compact discs that were archived with the raw data file for this study. An attempt was made to specify the level of the first two measured sections according to A Stereotaxic Atlas of the Developing Rat Brain by Nancy M. Sherwood and Paola S. Timiras (University of California Press, 1970).[2] These level designations are also included with the histopathology raw data. The statistical methods for the quantitative morphometric data were conducted by William Stitcler (Syracuse Research Corporation, Syracuse, N.Y.) using SAS Version 8 software.® The analyses consisted of the following: 1) Bartlett's test for variance homogeneity (tested at the $p \leq 0.001$ level); 2) one-way analysis of variance (ANOVA)-parametric if Bartlett's test yielded a $p \geq 0.001$; 3) Dunnett's control versus treatment comparison t test if the ANOVA was significant at $p \leq 0.05$.

Histopathology

Histopathologic evaluations were performed on all of the brain sections examined, but computer data entry was only conducted for the 16 postpartum day 22 rats per sex in each of the maternal high dosage and control groups. The computer program used for entry of the neuropathologic findings was

formatted to require input of specific neuroanatomic regions representative of the section levels examined, although all areas of every brain section were thoroughly examined.

## RESULTS AND DISCUSSION

Morphometry

The brain weights and morphometric measurements for the male postpartum day 22 rats are presented in Table 1. Similar parameters for the female postpartum day 22 rats are presented in Table 2. Note that the individual animal numbers are those of the dams, with one male and one female postpartum day 22 rat having been taken from each litter. For one such litter (Dam #16741), both the male and female brain had been received at EPL within the same container. Rather than exclude these two brains from analysis, the study pathologist made the decision to assume that the smaller of the two brains was from the female and the larger from the male. This assumption was based on the fact that the mean values for the male rat brain weights were slightly higher than those of the females. Because both of these brains were from the same maternal control group litter, the benefits of including them in the analysis appeared to outweigh any disadvantages related to the uncertainty of the rat's sex. The respective data for the control group rats are repeated on each of the pages with comparable data for the test substance-exposed rats in order to expedite comparison of these data. There are three data pages for each treatment group and sex.

Because there are 24 pages of morphometric data in this report, all of the measures found to differ significantly between any test substance-treated group and its respective control group at p values of either 0.05 of 0.01 are listed in tabular form as Text Table A, presented on the next page. In addition, mean values for each group's measurements are presented in Text Tables B and C.

To keep Text Table A in perspective and to guard against the possibility that some of the data points in this table may represent spurious false positive statistical flags, it is appropriate to also check for arithmetic trends in the measurements for these same brain regions. For the day 22 male rats, the following trends are apparent:

- Brain Weights – Numerically **increased** for Groups II, III, IV, and V
- Anterior-Posterior Cerebrum – No apparent inter-group differences
- Anterior-Posterior Cerebellum – No apparent inter-group differences
- Right and Left Frontal Cortices – Numerically **increased** for Groups II, III, IV, and V
- Right and Left Parietal Cortices – Numerically **increased** for Groups II, III, IV, and V
- Right and Left Striata – Variable pattern for Groups II, III, and IV; increase for Group V
- Anterior Level of the Corpus Callosum - Numerically **decreased** for Groups II, III, IV, and V
- Posterior Level of the Corpus Callosum - Numerically **increased** for Groups II, III, IV, and V (often significantly)
- Hippocampus - Numerically **increased** for Groups II, III, IV, and V

- Dentate Gyrus - Numerically **increased** for Groups II, III, IV, and V
  (NOTE: For the CA1 and CA3 regions of the hippocampus, there was a similar but less consistent trend, and any differences were of slightly lesser degree.)
- Cerebellar Thickness - Numerically **increased** for Groups II, III, IV, and V

**Text Table A**

**Measurements Differing Significantly Between Treatment Groups and Control Group**

| Neuroanatomic Region | Day 22 Male Rats | Day 22 Female Rats |
|---|---|---|
| Right Frontal Cortex | V > I @ $p \leq 0.05$ | |
| Left Frontal Cortex | III > I @ $p \leq 0.01$<br>V > I @ $p \leq 0.05$ | |
| Right Parietal Cortex | V > I @ $p \leq 0.05$ | |
| Left Parietal Cortex | III > I @ $p \leq 0.01$<br>V > I @ $p \leq 0.05$ | |
| Right Striatum | V > I @ $p \leq 0.05$ | II < I @ $p \leq 0.01$<br>III < I @ $p \leq 0.01$<br>IV < I @ $p \leq 0.01$ |
| Left Striatum | | II < I @ $p \leq 0.01$<br>III < I @ $p \leq 0.01$<br>IV < I @ $p \leq 0.01$ |
| Left Corpus Callosum, Level #1 (anterior) | | II < I @ $p \leq 0.05$ |
| Right Corpus Callosum, Level # 2 (posterior) | II > I @ $p \leq 0.01$<br>III > I @ $p \leq 0.05$<br>IV > I @ $p \leq 0.01$ | III > I @ $p \leq 0.01$ |
| Left Corpus Callosum, Level # 2 (posterior) | II > I @ $p \leq 0.05$<br>III > I @ $p \leq 0.05$<br>IV > I @ $p \leq 0.05$ | III > I @ $p \leq 0.01$ |
| Right Hippocampus | V > I @ $p \leq 0.05$ | |
| Left Hippocampus | IV > I @ $p \leq 0.05$<br>V > I @ $p \leq 0.05$ | |
| Right Dentate | V > I @ $p \leq 0.05$ | |
| Left CA1 of Hippocampus | III > I @ $p \leq 0.01$<br>V > I @ $p \leq 0.05$ | II < I @ $p \leq 0.01$<br>III < I @ $p \leq 0.05$ |
| Right CA3 of Hippocampus | | III < I @ $p \leq 0.01$ |
| Left CA3 of Hippocampus | III < I @ $p \leq 0.05$ | III < I @ $p \leq 0.05$ |
| Cerebellum | II > I @ $p \leq 0.01$<br>III > I @ $p \leq 0.01$<br>IV > I @ $p \leq 0.01$ | II > I @ $p \leq 0.01$<br>IV > I @ $p \leq 0.01$ |

For the day 22 female rats, the following trends are apparent:

- Brain Weights – Numerically **increased** for Groups III, IV, and V
- Anterior-Posterior Cerebrum – No apparent inter-group differences
- Anterior-Posterior Cerebellum – No apparent inter-group differences
- Right and Left Frontal Cortices – Slightly to minimally **decreased** for Groups II, III, and IV
- Right and Left Parietal Cortices – Slightly to minimally **decreased** for Groups II, III, and IV
- Right and Left Striata – Variable pattern, with numerical **decreases** being present for Groups II, III, and IV but with an **increase** for Group V
- Anterior Level of the Corpus Callosum - Variable pattern, with a numerical **decrease** for Group II, little inter-group difference for Groups III, and IV, and an **increase** for Group V
- Posterior Level of the Corpus Callosum - Numerically **increased** for Groups II, III, IV, and V
- Hippocampus - Numerically **decreased** for Groups II and III, but **increased** slightly for Groups IV and V
- Dentate Gyrus – Variable, with no consistent trend being evident
- Right and Left CA1 Region of Hippocampus - Numerically **decreased** for Groups II, III, IV, and V
- Right and Left CA3 Region of Hippocampus - Numerically **decreased** for Groups II, III, and IV; no apparent inter-group difference for Group V
- Cerebellar Thickness - Numerically **increased** for Groups II, III, IV, and V

**Text Table B**

**Group Means for Brain Weights and for Morphometry Data - Postpartum Day 22 Male Rats**

| Dose Group ID | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| I | 1.775 | 14.3 | 7.0 | 1815 | 1767 | 1835 | 1775 |
| II | 1.808 | 14.4 | 7.0 | 1840 | 1797 | 1839 | 1812 |
| III | 1.813 | 14.4 | 7.0 | 1866 | 1869** | 1883 | 1854** |
| IV | 1.832 | 14.4 | 7.1 | 1858 | 1828 | 1860 | 1815 |
| V | 1.797 | 14.4 | 6.9 | 1904* | 1839* | 1908* | 1832* |

| Dose Group ID | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| I | 2820 | 2862 | 224 | 233 | 1397 | 1365 | 792 |
| II | 2784 | 2802 | 211 | 212 | 1426 | 1404 | 807 |
| III | 2893 | 2810 | 218 | 217 | 1422 | 1434 | 811 |
| IV | 2832 | 2814 | 207 | 197 | 1422 | 1443* | 818 |
| V | 2976* | 2949 | 213 | 221 | 1472* | 1443* | 843* |

* Significantly different from the control group value at $p \leq 0.05$

** Significantly different from the control group value at p ≤ 0.01

## Text Table B
(Continued)

| Dose Group ID | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| I | 776 | 596 | 564 | 456 | 485 | 4479 | 188 | 190 |
| II | 805 | 588 | 581 | 476 | 483 | 4962** | 259** | 254* |
| III | 816 | 595 | 600** | 429 | 448* | 4947** | 257* | 250* |
| IV | 814 | 584 | 587 | 458 | 471 | 4881** | 253** | 242* |
| V | 809 | 605 | 593* | 465 | 497 | 4635 | 217 | 214 |

* Significantly different from the control group value at p ≤ 0.05
** Significantly different from the control group value at p ≤ 0.01

## Text Table C
Group Means for Brain Weights and for Morphometry Data – Postpartum Day 22 Female Rats

| Dose Group ID | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| I | 1.703 | 14.0 | 6.9 | 1877 | 1848 | 1854 | 1833 |
| II | 1.705 | 14.2 | 7.1 | 1818 | 1794 | 1805 | 1796 |
| III | 1.745 | 14.3 | 6.9 | 1811 | 1797 | 1827 | 1821 |
| IV | 1.764 | 14.3 | 7.0 | 1824 | 1845 | 1824 | 1821 |
| V | 1.746 | 14.1 | 6.9 | 1883 | 1841 | 1872 | 1824 |

| Dose Group ID | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| I | 2991 | 2985 | 218 | 220 | 1403 | 1398 | 803 |
| II | 2685** | 2661** | 185 | 179* | 1370 | 1371 | 792 |
| III | 2749** | 2733** | 232 | 236 | 1354 | 1379 | 778 |
| IV | 2790** | 2784** | 217 | 217 | 1410 | 1438 | 798 |
| V | 3099 | 3009 | 242 | 256 | 1415 | 1400 | 816 |

| Dose Group ID | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| I | 782 | 597 | 613 | 464 | 483 | 4692 | 193 | 193 |
| II | 790 | 585 | 570** | 437 | 450 | 4962** | 216 | 216 |
| III | 795 | 578 | 578* | 414** | 429* | 4842 | 279** | 272** |
| IV | 824 | 586 | 588 | 453 | 454 | 5028** | 226 | 226 |
| V | 811 | 590 | 592 | 461 | 498 | 4746 | 208 | 211 |

* Significantly different from the control group value at p ≤ 0.05
** Significantly different from the control group value at p ≤ 0.01

Those regions characterized by side (*i.e.* right *vs.* left) variation or which may have been increased in dimension for some groups but decreased in others may represent a function of sampling/section level. In fact, it is important to emphasize that these sections were created at different points in time, with Groups I and V being sectioned, initially, and then the blocks from the other groups being sectioned in stepwise fashion. Any slight variations in section level aside, there is still a distinct trend in the data for increased sizes of certain brain regions in the male rats and for a more variable (either increased or decreased) pattern to be present in the females. For the corpus callosum, which was one of the key regions of interest based on the results of a prior study on this test substance,[1] both male and female rats demonstrated a tendency for the more anterior portion (*i.e.* level of the anterior commissure) to be thinner than in comparable control rats but for the more posterior region (level of the infundibulum) to be thicker than for the controls. It is worth emphasizing that the posterior measurement of the corpus callosum was taken quite close to (possibly within) the splenium, a region in which the corpus callosum becomes thicker in the normal brain. Therefore, it is possible that the test substance exposure may have resulted in shortening of the anterior to posterior length of this white matter tract (as apposed to causing it to become thicker by some other mechanism such as a decrease in axon loss during development). Sagittal sections could be prepared from some of the brains from the day 5 rats present on this study in order to check for such a possibility.

The pattern of inter-group difference seen in the morphometric parameters for the postpartum day 22 rats is similar to that encountered with the postpartum day 10 rats present on this study. These data suggest not only a treatment-related effect on brain development but that there may also be some degree of sexual dimorphism regarding response of rats to the test substance. Based on the data from the day 22 component of this study, there is no clear-cut evidence of a no-effect level, but also little to no evidence of a dose response. Interpretation of these trends is likely to require further study and consultation with developmental neurobiologists.

Histopathology

The histopathologic findings on this study are summarized for the postpartum day 22 male rats in Table 3 and for the postpartum day 22 female rats in Table 4. Individual animal data (which would have included the distributions of microscopic alterations had any been present) are presented in Tables 5 and 6. Although the postpartum day 22 brains were poorly myelinated, they were otherwise fully developed in appearance, with only a minimal periventricular mantle layer being present in some regions. These brains lacked the foci of physiologic cell death seen in the postpartum day 10 brains. There were no treatment-related neuropathologic findings, and the brains of the rats in the maternal high dose groups were similar in their microscopic appearances to those of the control group rats.

## CONCLUSIONS

Detailed microscopic examinations of multiple brain sections from postpartum day 22 rats in each of the maternal control and maternal high dose groups failed to indicate any evidence of treatment-related neuropathologic effects. However, differences in a number of morphometric parameters provide evidence of a possible treatment-related effect on brain development. The pattern of treatment-related differences in morphometric measurements seen for the postpartum day 22 rats was similar to that encountered with the postpartum day 10 rats present on this study, thus providing increased evidence that the effects are likely to be genuine rather than evidence of aberrant control groups. For both the postpartum day 10 and day 22 rats, there is also evidence of sexual dimorphism *re:* both the pattern of response and the sensitivity to the test substance exposure. Test substance-exposed male rats tended to have increased linear measurements, with the reverse generally being the case for the females. Based on the data from the day 22 component of this study, there is no clear-cut evidence of a no-effect level.

3-13-01

Robert H. Garman, DVM — Date
Diplomate, ACVP

## *Reference*

1. *A Neurobehavioral Developmental Study of Ammonium Perchlorate Administered Orally in Drinking Water to Rats – Neuropathology Report on $F_1$ Day 12 Postpartum Rats*; Argus Protocol 1613-002; Sponsor's study No. 7757A210-1096-25F, 1998

2. Sherwood, NM and Timiras, PS: A Stereotoxic Atlas of the Developing Rat Brain. University of California Press, Berkeley and Los Angeles, CA; © 1970, 209 pages

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**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.2 | 6.9 | 1752 | 1776 | 1776 | 1800 |
| 16732 | 1.700 | 14.0 | 6.7 | 1896 | 1800 | 1824 | 1824 |
| 16734 | 1.800 | 14.2 | 7.4 | 1776 | 1896 | 1800 | 1848 |
| 16735 | 1.800 | 14.4 | 7.1 | 1920 | 1776 | 1848 | 1800 |
| 16736 | 1.700 | 14.1 | 6.5 | 1944 | 1728 | 1872 | 1824 |
| 16737 | 1.750 | 14.2 | 6.9 | 1752 | 1680 | 1800 | 1704 |
| 16738 | 1.850 | 14.4 | 7.1 | 1848 | 1800 | 1872 | 1728 |
| 16740 | 1.700 | 14.0 | 7.3 | 1752 | 1608 | 1776 | 1656 |
| 16741 | 1.700 | 13.8 | 6.8 | 1800 | 1824 | 1800 | 1848 |
| 16742 | 1.800 | 14.3 | 7.2 | 1848 | 1776 | 1848 | 1680 |
| 16745 | 1.800 | 14.4 | 7.1 | 1848 | 1824 | 1992 | 1872 |
| 16746 | 1.750 | 14.3 | 6.6 | 1728 | 1728 | 1704 | 1776 |
| 16747 | 1.800 | 14.3 | 7.0 | 1752 | 1752 | 1824 | 1752 |
| 16749 | 1.900 | 14.6 | 7.1 | 1704 | 1728 | 1752 | 1776 |
| 16750 | 1.850 | 14.8 | 6.9 | 1872 | 1800 | 1968 | 1728 |
| 16753 | 1.800 | 14.1 | 7.5 | 1848 | 1776 | 1896 | 1776 |
| **MEAN** | **1.775** | **14.3** | **7.0** | **1815** | **1767** | **1835** | **1775** |
| **SD** | **0.063** | **0.2** | **0.3** | **72.7** | **65.5** | **74.9** | **62.9** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16755 | 1.800 | 14.5 | 6.9 | 1824 | 1776 | 1776 | 1680 |
| 16758 | 1.775 | 14.4 | 6.8 | 1752 | 1728 | 1776 | 1776 |
| 16760 | 1.665 | 13.7 | 6.8 | 1800 | 1680 | 1704 | 1680 |
| 16761 | 1.835 | 14.1 | 6.9 | 1848 | 1824 | 1752 | 1800 |
| 16762 | 1.800 | 14.0 | 6.9 | 1680 | 1608 | 1704 | 1680 |
| 16763 | 1.800 | 14.1 | 7.5 | 1848 | 1872 | 1848 | 1848 |
| 16764 | 1.800 | 13.9 | 7.0 | 1824 | 1896 | 1920 | 1800 |
| 16765 | 1.800 | 15.0 | 7.0 | 1704 | 1680 | 1776 | 1728 |
| 16767 | 1.900 | 14.8 | 6.9 | 1896 | 1872 | 1920 | 1920 |
| 16768 | 2.000 | 15.0 | 7.4 | 2112 | 1992 | 1968 | 1992 |
| 16769 | 1.700 | 14.2 | 7.3 | 1752 | 1752 | 1776 | 1752 |
| 16770 | 1.935 | 14.4 | 7.6 | 1824 | 1800 | 1920 | 1824 |
| 16771 | 1.900 | 14.6 | 7.0 | 1920 | 1848 | 1896 | 1872 |
| 16773 | 1.725 | 14.2 | 7.0 | 1872 | 1752 | 1848 | 1824 |
| 16774 | 1.725 | 14.5 | 6.5 | 1848 | 1848 | 1896 | 1896 |
| 16776 | 1.765 | 14.2 | 6.8 | 1944 | 1824 | 1944 | 1920 |
| **MEAN** | **1.808** | **14.4** | **7.0** | **1840** | **1797** | **1839** | **1812** |
| **SD** | **0.089** | **0.4** | **0.3** | **102.5** | **95.9** | **87.1** | **94.0** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 3024 | 3024 | 317 | 346 | 1392 | 1368 | 792 |
| 16732 | 2688 | 2736 | 192 | 192 | 1512 | 1512 | 888 |
| 16734 | 2736 | 3072 | 240 | 269 | 1512 | 1488 | 864 |
| 16735 | 2688 | 2784 | 240 | 230 | 1392 | 1392 | 816 |
| 16736 | 3120 | 3072 | 269 | 259 | 1320 | 1344 | 744 |
| 16737 | 2784 | 2736 | 202 | 192 | 1368 | 1368 | 792 |
| 16738 | 2880 | 2976 | 182 | 202 | 1392 | 1416 | 768 |
| 16740 | 2832 | 2832 | 211 | 211 | 1296 | 1200 | 720 |
| 16741 | 2928 | 2976 | 307 | 365 | 1392 | 1344 | 720 |
| 16742 | 2592 | 2784 | 202 | 192 | 1512 | 1464 | 888 |
| 16745 | 2784 | 2880 | 211 | 211 | 1368 | 1200 | 792 |
| 16746 | 2736 | 2640 | 182 | 163 | 1272 | 1320 | 720 |
| 16747 | 2832 | 2736 | 221 | 288 | 1440 | 1320 | 816 |
| 16749 | 2688 | 2736 | 163 | 163 | 1440 | 1392 | 768 |
| 16750 | 2784 | 2784 | 202 | 192 | 1296 | 1392 | 744 |
| 16753 | 3024 | 3024 | 240 | 250 | 1440 | 1320 | 840 |
| **MEAN** | **2820** | **2862** | **224** | **233** | **1397** | **1365** | **792** |
| **SD** | **144.0** | **141.2** | **43.5** | **59.9** | **77.0** | **86.7** | **56.8** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16755 | 2736 | 2832 | 250 | 221 | 1464 | 1392 | 864 |
| 16758 | 2784 | 2688 | 182 | 192 | 1320 | 1320 | 720 |
| 16760 | 2496 | 2544 | 278 | 240 | 1392 | 1368 | 768 |
| 16761 | 2496 | 2496 | 173 | 182 | 1440 | 1368 | 792 |
| 16762 | 2688 | 2736 | 173 | 163 | 1272 | 1296 | 720 |
| 16763 | 2736 | 3024 | 211 | 240 | 1488 | 1440 | 840 |
| 16764 | 2832 | 2832 | 173 | 173 | 1488 | 1464 | 888 |
| 16765 | 2880 | 2736 | 173 | 173 | 1368 | 1296 | 744 |
| 16767 | 2640 | 2688 | 192 | 192 | 1440 | 1488 | 864 |
| 16768 | 3072 | 3072 | 192 | 211 | 1464 | 1488 | 816 |
| 16769 | 2928 | 2928 | 269 | 269 | 1224 | 1296 | 768 |
| 16770 | 2976 | 3024 | 221 | 240 | 1488 | 1392 | 864 |
| 16771 | 3216 | 3024 | 298 | 278 | 1608 | 1560 | 792 |
| 16773 | 2736 | 2640 | 192 | 202 | 1416 | 1440 | 792 |
| 16774 | 2544 | 2832 | 202 | 211 | 1512 | 1416 | 840 |
| 16776 | 2784 | 2736 | 202 | 202 | 1440 | 1440 | 840 |
| **MEAN** | **2784** | **2802** | **211** | **212** | **1426** | **1404** | **807** |
| **SD** | **199.8** | **176.0** | **40.7** | **34.0** | **95.2** | **77.9** | **53.2** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 816 | 600 | 576 | 480 | 504 | 4416 | 192 | 192 |
| 16732 | 864 | 576 | 576 | 456 | 456 | 4656 | 192 | 192 |
| 16734 | 864 | 624 | 504 | 504 | 528 | 4608 | 192 | 192 |
| 16735 | 792 | 576 | 576 | 384 | 480 | 4608 | 202 | 202 |
| 16736 | 744 | 552 | 552 | 432 | 432 | 4176 | 182 | 182 |
| 16737 | 792 | 840 | 552 | 504 | 480 | 4368 | 230 | 240 |
| 16738 | 768 | 576 | 600 | 456 | 504 | 4368 | 125 | 144 |
| 16740 | 648 | 528 | 600 | 480 | 504 | 4656 | 182 | 192 |
| 16741 | 720 | 576 | 528 | 456 | 480 | 4416 | 163 | 154 |
| 16742 | 816 | 624 | 600 | 480 | 480 | 4512 | 173 | 173 |
| 16745 | 744 | 552 | 576 | 408 | 480 | 4656 | 173 | 173 |
| 16746 | 744 | 528 | 528 | 408 | 432 | 4080 | 211 | 211 |
| 16747 | 792 | 624 | 528 | 480 | 504 | 4272 | 192 | 192 |
| 16749 | 744 | 624 | 576 | 504 | 528 | 4992 | 211 | 221 |
| 16750 | 792 | 552 | 552 | 408 | 456 | 4368 | 192 | 192 |
| 16753 | 768 | 576 | 600 | 456 | 504 | 4512 | 192 | 192 |
| **MEAN** | **776** | **596** | **564** | **456** | **485** | **4479** | **188** | **190** |
| **SD** | **53.8** | **72.9** | **30.4** | **38.2** | **29.4** | **220.8** | **23.5** | **23.3** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16755 | 816 | 576 | 600 | 408 | 432 | 4992 | 278 | 278 |
| 16758 | 744 | 576 | 576 | 408 | 432 | 4896 | 192 | 211 |
| 16760 | 768 | 600 | 576 | 432 | 432 | 4800 | 307 | 288 |
| 16761 | 768 | 600 | 528 | 504 | 528 | 4800 | 202 | 221 |
| 16762 | 744 | 528 | 528 | 432 | 456 | 4896 | 202 | 192 |
| 16763 | 816 | 624 | 600 | 504 | 504 | 4944 | 259 | 288 |
| 16764 | 792 | 624 | 600 | 504 | 480 | 5280 | 336 | 307 |
| 16765 | 720 | 528 | 504 | 576 | 552 | 4416 | 182 | 173 |
| 16767 | 864 | 600 | 600 | 480 | 480 | 5232 | 307 | 298 |
| 16768 | 864 | 600 | 600 | 480 | 528 | 5088 | 278 | 288 |
| 16769 | ---- | 456 | ---- | 480 | 552 | 5040 | 163 | 144 |
| 16770 | 840 | 600 | 552 | 504 | 480 | 5232 | 326 | 326 |
| 16771 | 888 | 696 | 648 | 552 | 552 | 5088 | 250 | 221 |
| 16773 | 816 | 600 | 600 | 456 | 456 | 5136 | 250 | 250 |
| 16774 | 792 | 600 | 600 | 480 | 456 | 4560 | 211 | 240 |
| 16776 | 840 | 600 | 600 | 408 | 408 | 4992 | 394 | 346 |
| **MEAN** | **805** | **588** | **581** | **476** | **483** | **4962**** | **259**** | **254*** |
| **SD** | **49.6** | **51.8** | **37.6** | **49.7** | **47.9** | **236.4** | **64.6** | **57.3** |

*** Significantly different from the control group value at $p \leq 0.05$**

**** Significantly different from the control group value at $p \leq 0.01$**

**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.2 | 6.9 | 1752 | 1776 | 1776 | 1800 |
| 16732 | 1.700 | 14.0 | 6.7 | 1896 | 1800 | 1824 | 1824 |
| 16734 | 1.800 | 14.2 | 7.4 | 1776 | 1896 | 1800 | 1848 |
| 16735 | 1.800 | 14.4 | 7.1 | 1920 | 1776 | 1848 | 1800 |
| 16736 | 1.700 | 14.1 | 6.5 | 1944 | 1728 | 1872 | 1824 |
| 16737 | 1.750 | 14.2 | 6.9 | 1752 | 1680 | 1800 | 1704 |
| 16738 | 1.850 | 14.4 | 7.1 | 1848 | 1800 | 1872 | 1728 |
| 16740 | 1.700 | 14.0 | 7.3 | 1752 | 1608 | 1776 | 1656 |
| 16741 | 1.700 | 13.8 | 6.8 | 1800 | 1824 | 1800 | 1848 |
| 16742 | 1.800 | 14.3 | 7.2 | 1848 | 1776 | 1848 | 1680 |
| 16745 | 1.800 | 14.4 | 7.1 | 1848 | 1824 | 1992 | 1872 |
| 16746 | 1.750 | 14.3 | 6.6 | 1728 | 1728 | 1704 | 1776 |
| 16747 | 1.800 | 14.3 | 7.0 | 1752 | 1752 | 1824 | 1752 |
| 16749 | 1.900 | 14.6 | 7.1 | 1704 | 1728 | 1752 | 1776 |
| 16750 | 1.850 | 14.8 | 6.9 | 1872 | 1800 | 1968 | 1728 |
| 16753 | 1.800 | 14.1 | 7.5 | 1848 | 1776 | 1896 | 1776 |
| **MEAN** | **1.775** | **14.3** | **7.0** | **1815** | **1767** | **1835** | **1775** |
| **SD** | **0.063** | **0.2** | **0.3** | **72.7** | **65.5** | **74.9** | **62.9** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16781 | 1.835 | 14.6 | 7.1 | 1800 | 1896 | 1872 | 1896 |
| 16782 | 1.900 | 14.6 | 6.8 | 1896 | 1968 | 1728 | 1848 |
| 16783 | 1.815 | 14.6 | 6.4 | 1896 | 1920 | 1920 | 1872 |
| 16784 | 1.875 | 14.6 | 7.2 | 1800 | 1728 | 1848 | 1752 |
| 16786 | 1.700 | 14.2 | 6.8 | 1920 | 1872 | 1896 | 1800 |
| 16787 | 1.860 | 14.7 | 7.5 | 1872 | 1848 | 1872 | 1872 |
| 16791 | 1.765 | 14.3 | 7.0 | 1848 | 1896 | 1848 | 1872 |
| 16792 | 1.850 | 14.5 | 6.9 | 1680 | 1752 | 1872 | 1896 |
| 16793 | 1.900 | 14.5 | 6.9 | 1944 | 1968 | 1920 | 1920 |
| 16794 | 1.750 | 13.7 | 6.8 | 1896 | 2016 | 2040 | 1872 |
| 16795 | 1.700 | 13.9 | 6.9 | 1848 | 1680 | 1848 | 1776 |
| 16796 | 1.900 | 14.5 | 7.2 | 1944 | 1920 | 1944 | 1872 |
| 16797 | 1.800 | 14.4 | 7.3 | 1872 | 1824 | 1872 | 1800 |
| 16798 | 1.745 | 14.6 | 6.8 | 1920 | 1800 | 1848 | 1800 |
| 16799 | 1.800 | 14.2 | 6.7 | 1848 | 1944 | 1920 | 1968 |
| **MEAN** | **1.813** | **14.4** | **7.0** | **1866** | **1869**** | **1883** | **1854**** |
| **SD** | **0.069** | **0.29** | **0.3** | **68.2** | **96.4** | **66.6** | **58.4** |

**** Significantly different from the control group value at $p \leq 0.01$**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 3024 | 3024 | 317 | 346 | 1392 | 1368 | 792 |
| 16732 | 2688 | 2736 | 192 | 192 | 1512 | 1512 | 888 |
| 16734 | 2736 | 3072 | 240 | 269 | 1512 | 1488 | 864 |
| 16735 | 2688 | 2784 | 240 | 230 | 1392 | 1392 | 816 |
| 16736 | 3120 | 3072 | 269 | 259 | 1320 | 1344 | 744 |
| 16737 | 2784 | 2736 | 202 | 192 | 1368 | 1368 | 792 |
| 16738 | 2880 | 2976 | 182 | 202 | 1392 | 1416 | 768 |
| 16740 | 2832 | 2832 | 211 | 211 | 1296 | 1200 | 720 |
| 16741 | 2928 | 2976 | 307 | 365 | 1392 | 1344 | 720 |
| 16742 | 2592 | 2784 | 202 | 192 | 1512 | 1464 | 888 |
| 16745 | 2784 | 2880 | 211 | 211 | 1368 | 1200 | 792 |
| 16746 | 2736 | 2640 | 182 | 163 | 1272 | 1320 | 720 |
| 16747 | 2832 | 2736 | 221 | 288 | 1440 | 1320 | 816 |
| 16749 | 2688 | 2736 | 163 | 163 | 1440 | 1392 | 768 |
| 16750 | 2784 | 2784 | 202 | 192 | 1296 | 1392 | 744 |
| 16753 | 3024 | 3024 | 240 | 250 | 1440 | 1320 | 840 |
| **MEAN** | **2820** | **2862** | **224** | **233** | **1397** | **1365** | **792** |
| **SD** | **144.0** | **141.2** | **43.5** | **59.9** | **77.0** | **86.7** | **56.8** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16781 | 2832 | 2784 | 192 | 182 | 1440 | 1392 | 840 |
| 16782 | 2784 | 2640 | 202 | 192 | 1440 | 1464 | 816 |
| 16783 | 2880 | 2928 | 202 | 202 | 1512 | 1488 | 840 |
| 16784 | 2880 | 2880 | 163 | 163 | 1392 | 1440 | 768 |
| 16786 | 2880 | 2688 | 202 | 202 | 1464 | 1416 | 840 |
| 16787 | 2976 | 2784 | 269 | 240 | 1368 | 1440 | 768 |
| 16791 | 2880 | 2784 | 259 | 240 | 1392 | 1416 | 768 |
| 16792 | 2880 | 2784 | 240 | 259 | 1440 | 1416 | 816 |
| 16793 | 2928 | 2880 | 250 | 278 | 1512 | 1488 | 864 |
| 16794 | 3024 | 2784 | 278 | 288 | 1464 | 1560 | 864 |
| 16795 | 2976 | 2736 | 182 | 173 | 1296 | 1272 | 768 |
| 16796 | 2928 | 2784 | 250 | 259 | 1488 | 1464 | 840 |
| 16797 | 2784 | 2832 | 154 | 154 | 1440 | 1416 | 816 |
| 16798 | 3072 | 3072 | 240 | 230 | 1344 | 1416 | 768 |
| 16799 | 2688 | 2784 | 182 | 192 | 1344 | 1416 | 792 |
| **MEAN** | **2893** | **2810** | **218** | **217** | **1422** | **1434** | **811** |
| **SD** | **98.5** | **102.4** | **39.7** | **42.5** | **64.4** | **61.8** | **36.5** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 816 | 600 | 576 | 480 | 504 | 4416 | 192 | 192 |
| 16732 | 864 | 576 | 576 | 456 | 456 | 4656 | 192 | 192 |
| 16734 | 864 | 624 | 504 | 504 | 528 | 4608 | 192 | 192 |
| 16735 | 792 | 576 | 576 | 384 | 480 | 4608 | 202 | 202 |
| 16736 | 744 | 552 | 552 | 432 | 432 | 4176 | 182 | 182 |
| 16737 | 792 | 840 | 552 | 504 | 480 | 4368 | 230 | 240 |
| 16738 | 768 | 576 | 600 | 456 | 504 | 4368 | 125 | 144 |
| 16740 | 648 | 528 | 600 | 480 | 504 | 4656 | 182 | 192 |
| 16741 | 720 | 576 | 528 | 456 | 480 | 4416 | 163 | 154 |
| 16742 | 816 | 624 | 600 | 480 | 480 | 4512 | 173 | 173 |
| 16745 | 744 | 552 | 576 | 408 | 480 | 4656 | 173 | 173 |
| 16746 | 744 | 528 | 528 | 408 | 432 | 4080 | 211 | 211 |
| 16747 | 792 | 624 | 528 | 480 | 504 | 4272 | 192 | 192 |
| 16749 | 744 | 624 | 576 | 504 | 528 | 4992 | 211 | 221 |
| 16750 | 792 | 552 | 552 | 408 | 456 | 4368 | 192 | 192 |
| 16753 | 768 | 576 | 600 | 456 | 504 | 4512 | 192 | 192 |
| **MEAN** | **776** | **596** | **564** | **456** | **485** | **4479** | **188** | **190** |
| **SD** | **53.8** | **72.9** | **30.4** | **38.2** | **29.4** | **220.8** | **23.5** | **23.3** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16781 | 792 | 600 | 600 | 456 | 384 | 5088 | 202 | 202 |
| 16782 | 840 | 600 | 600 | 480 | 480 | 4800 | 202 | 240 |
| 16783 | 840 | 624 | 624 | 480 | 528 | 4608 | 182 | 192 |
| 16784 | 840 | 600 | 576 | 456 | 432 | 4752 | 192 | 192 |
| 16786 | 816 | 600 | 600 | 480 | 480 | 4704 | 173 | 173 |
| 16787 | 792 | 552 | 600 | 360 | 456 | 5088 | 250 | 240 |
| 16791 | 768 | 600 | 624 | 408 | 432 | 4848 | 230 | 230 |
| 16792 | 816 | 624 | 600 | 360 | 456 | 4656 | 470 | 451 |
| 16793 | 840 | 624 | 648 | 480 | 480 | 5280 | 240 | 230 |
| 16794 | 888 | 624 | 624 | 384 | 456 | 5136 | 336 | 307 |
| 16795 | 744 | 528 | 528 | 360 | 384 | 4848 | 269 | 278 |
| 16796 | 840 | 648 | 624 | 384 | 432 | 5328 | 346 | 336 |
| 16797 | 816 | 576 | 600 | 456 | 456 | 5232 | 192 | 144 |
| 16798 | 816 | 576 | 576 | 432 | 432 | 5136 | 144 | 154 |
| 16799 | 792 | 552 | 576 | 456 | 432 | 4704 | 432 | 384 |
| **MEAN** | **816** | **595** | **600**** | **429** | **448*** | **4947**** | **257*** | **250*** |
| **SD** | **35.1** | **33.0** | **28.7** | **47.9** | **37.0** | **245.7** | **96.8** | **87.1** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.2 | 6.9 | 1752 | 1776 | 1776 | 1800 |
| 16732 | 1.700 | 14.0 | 6.7 | 1896 | 1800 | 1824 | 1824 |
| 16734 | 1.800 | 14.2 | 7.4 | 1776 | 1896 | 1800 | 1848 |
| 16735 | 1.800 | 14.4 | 7.1 | 1920 | 1776 | 1848 | 1800 |
| 16736 | 1.700 | 14.1 | 6.5 | 1944 | 1728 | 1872 | 1824 |
| 16737 | 1.750 | 14.2 | 6.9 | 1752 | 1680 | 1800 | 1704 |
| 16738 | 1.850 | 14.4 | 7.1 | 1848 | 1800 | 1872 | 1728 |
| 16740 | 1.700 | 14.0 | 7.3 | 1752 | 1608 | 1776 | 1656 |
| 16741 | 1.700 | 13.8 | 6.8 | 1800 | 1824 | 1800 | 1848 |
| 16742 | 1.800 | 14.3 | 7.2 | 1848 | 1776 | 1848 | 1680 |
| 16745 | 1.800 | 14.4 | 7.1 | 1848 | 1824 | 1992 | 1872 |
| 16746 | 1.750 | 14.3 | 6.6 | 1728 | 1728 | 1704 | 1776 |
| 16747 | 1.800 | 14.3 | 7.0 | 1752 | 1752 | 1824 | 1752 |
| 16749 | 1.900 | 14.6 | 7.1 | 1704 | 1728 | 1752 | 1776 |
| 16750 | 1.850 | 14.8 | 6.9 | 1872 | 1800 | 1968 | 1728 |
| 16753 | 1.800 | 14.1 | 7.5 | 1848 | 1776 | 1896 | 1776 |
| **MEAN** | **1.775** | **14.3** | **7.0** | **1815** | **1767** | **1835** | **1775** |
| **SD** | **0.063** | **0.2** | **0.3** | **72.7** | **65.5** | **74.9** | **62.9** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16800 | 1.800 | 13.9 | 7.3 | 1776 | 1824 | 1872 | 1800 |
| 16801 | 1.805 | 14.2 | 7.2 | 1800 | 1824 | 1824 | 1824 |
| 16802 | 1.805 | 14.2 | 6.8 | 1752 | 1704 | 1800 | 1800 |
| 16803 | 1.800 | 14.8 | 7.0 | 1872 | 1776 | 1824 | 1848 |
| 16805 | 1.900 | 14.7 | 6.8 | 1872 | 1848 | 1872 | 1776 |
| 16806 | 1.905 | 14.8 | 7.6 | 1896 | 1872 | 1920 | 1752 |
| 16807 | 1.800 | 14.0 | 7.1 | 1824 | 1800 | 1776 | 1800 |
| 16808 | 1.800 | 14.4 | 6.8 | 1992 | 1944 | 1944 | 1848 |
| 16810 | 1.805 | 14.1 | 7.3 | 1896 | 1896 | 1872 | 1872 |
| 16811 | 1.900 | 14.5 | 7.3 | 1848 | 1728 | 1872 | 1776 |
| 16814 | 1.805 | 14.3 | 7.2 | 1944 | 1848 | 1872 | 1848 |
| 16815 | 1.900 | 14.2 | 6.9 | 1824 | 1776 | 1848 | 1776 |
| 16817 | 1.865 | 14.5 | 6.9 | 1920 | 1896 | 1920 | 1848 |
| 16818 | 1.850 | 14.7 | 7.0 | 1920 | 1872 | 1920 | 1800 |
| 16820 | 1.750 | 14.0 | 6.7 | 1800 | 1752 | 1848 | 1872 |
| 16822 | 1.815 | 14.5 | 7.2 | 1800 | 1896 | 1776 | 1800 |
| **MEAN** | **1.832** | **14.4** | **7.1** | **1858** | **1828** | **1860** | **1815** |
| **SD** | **0.048** | **0.3** | **0.2** | **66.7** | **68.0** | **51.1** | **37.1** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 3024 | 3024 | 317 | 346 | 1392 | 1368 | 792 |
| 16732 | 2688 | 2736 | 192 | 192 | 1512 | 1512 | 888 |
| 16734 | 2736 | 3072 | 240 | 269 | 1512 | 1488 | 864 |
| 16735 | 2688 | 2784 | 240 | 230 | 1392 | 1392 | 816 |
| 16736 | 3120 | 3072 | 269 | 259 | 1320 | 1344 | 744 |
| 16737 | 2784 | 2736 | 202 | 192 | 1368 | 1368 | 792 |
| 16738 | 2880 | 2976 | 182 | 202 | 1392 | 1416 | 768 |
| 16740 | 2832 | 2832 | 211 | 211 | 1296 | 1200 | 720 |
| 16741 | 2928 | 2976 | 307 | 365 | 1392 | 1344 | 720 |
| 16742 | 2592 | 2784 | 202 | 192 | 1512 | 1464 | 888 |
| 16745 | 2784 | 2880 | 211 | 211 | 1368 | 1200 | 792 |
| 16746 | 2736 | 2640 | 182 | 163 | 1272 | 1320 | 720 |
| 16747 | 2832 | 2736 | 221 | 288 | 1440 | 1320 | 816 |
| 16749 | 2688 | 2736 | 163 | 163 | 1440 | 1392 | 768 |
| 16750 | 2784 | 2784 | 202 | 192 | 1296 | 1392 | 744 |
| 16753 | 3024 | 3024 | 240 | 250 | 1440 | 1320 | 840 |
| **MEAN** | **2820** | **2862** | **224** | **233** | **1397** | **1365** | **792** |
| **SD** | **144.0** | **141.2** | **43.5** | **59.9** | **77.0** | **86.7** | **56.8** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16800 | 2736 | 2784 | 211 | 211 | 1272 | 1272 | 768 |
| 16801 | 2784 | 2640 | 240 | 211 | 1392 | 1488 | 768 |
| 16802 | 2784 | 2688 | 288 | 288 | 1440 | 1416 | 864 |
| 16803 | 2640 | 2592 | 192 | 192 | 1344 | 1416 | 792 |
| 16805 | 3120 | 2976 | 250 | 211 | 1272 | 1272 | 768 |
| 16806 | 2832 | 2832 | 144 | 106 | 1416 | 1416 | 864 |
| 16807 | 2448 | 2544 | 182 | 173 | 1416 | 1464 | 840 |
| 16808 | 3024 | 2736 | 202 | 192 | 1464 | 1440 | 744 |
| 16810 | 2976 | 2976 | 163 | 173 | 1392 | 1488 | 768 |
| 16811 | 2784 | 2736 | 240 | 240 | 1560 | 1488 | 912 |
| 16814 | 2784 | 2976 | 211 | 192 | 1464 | 1464 | 840 |
| 16815 | 2688 | 2928 | 202 | 211 | 1440 | 1536 | 840 |
| 16817 | 2880 | 2832 | 202 | 192 | 1488 | 1536 | 840 |
| 16818 | 2976 | 2784 | 173 | 154 | 1440 | 1392 | 864 |
| 16820 | 2976 | 3072 | 202 | 202 | 1512 | 1512 | 888 |
| 16822 | 2880 | 2928 | 211 | 202 | 1440 | 1488 | 720 |
| **MEAN** | **2832** | **2814** | **207** | **197** | **1422** | **1443*** | **818** |
| **SD** | **165.4** | **153.7** | **35.2** | **38.7** | **77.1** | **79.3** | **56.4** |

* **Significantly different from the control group value at $p \leq 0.05$**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**
**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 816 | 600 | 576 | 480 | 504 | 4416 | 192 | 192 |
| 16732 | 864 | 576 | 576 | 456 | 456 | 4656 | 192 | 192 |
| 16734 | 864 | 624 | 504 | 504 | 528 | 4608 | 192 | 192 |
| 16735 | 792 | 576 | 576 | 384 | 480 | 4608 | 202 | 202 |
| 16736 | 744 | 552 | 552 | 432 | 432 | 4176 | 182 | 182 |
| 16737 | 792 | 840 | 552 | 504 | 480 | 4368 | 230 | 240 |
| 16738 | 768 | 576 | 600 | 456 | 504 | 4368 | 125 | 144 |
| 16740 | 648 | 528 | 600 | 480 | 504 | 4656 | 182 | 192 |
| 16741 | 720 | 576 | 528 | 456 | 480 | 4416 | 163 | 154 |
| 16742 | 816 | 624 | 600 | 480 | 480 | 4512 | 173 | 173 |
| 16745 | 744 | 552 | 576 | 408 | 480 | 4656 | 173 | 173 |
| 16746 | 744 | 528 | 528 | 408 | 432 | 4080 | 211 | 211 |
| 16747 | 792 | 624 | 528 | 480 | 504 | 4272 | 192 | 192 |
| 16749 | 744 | 624 | 576 | 504 | 528 | 4992 | 211 | 221 |
| 16750 | 792 | 552 | 552 | 408 | 456 | 4368 | 192 | 192 |
| 16753 | 768 | 576 | 600 | 456 | 504 | 4512 | 192 | 192 |
| **MEAN** | **776** | **596** | **564** | **456** | **485** | **4479** | **188** | **190** |
| **SD** | **53.8** | **72.9** | **30.4** | **38.2** | **29.4** | **220.8** | **23.5** | **23.3** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16800 | 744 | 552 | 600 | 456 | 504 | 4848 | 192 | 192 |
| 16801 | 768 | 600 | 600 | 432 | 456 | 5328 | 346 | 288 |
| 16802 | 816 | 600 | 528 | 432 | 432 | 5040 | 326 | 278 |
| 16803 | 816 | 576 | 552 | 432 | 456 | 4512 | 278 | 250 |
| 16805 | ---- | 480 | ---- | 552 | 552 | 4224 | 211 | 211 |
| 16806 | 864 | 552 | 576 | 456 | 456 | 5088 | 202 | 192 |
| 16807 | 864 | 552 | 576 | 456 | 456 | 4704 | 230 | 221 |
| 16808 | 720 | 600 | 576 | 504 | 504 | 5088 | 182 | 173 |
| 16810 | 912 | 600 | 576 | 456 | 456 | 5088 | 202 | 211 |
| 16811 | 864 | 648 | 624 | 456 | 456 | 4464 | 365 | 374 |
| 16814 | 768 | 624 | 576 | 432 | 480 | 4752 | 365 | 326 |
| 16815 | 768 | 600 | 600 | 384 | 480 | 5136 | 307 | 336 |
| 16817 | 768 | 624 | 624 | 480 | 480 | 4800 | 182 | 173 |
| 16818 | 840 | 552 | 552 | 480 | 480 | 4800 | 163 | 154 |
| 16820 | 864 | 576 | 624 | 456 | 432 | 5136 | 250 | 259 |
| 16822 | 840 | 600 | 624 | 456 | 456 | 5088 | 250 | 230 |
| **MEAN** | **814** | **584** | **587** | **458** | **471** | **4881**** | **253**** | **242*** |
| **SD** | **55.5** | **39.9** | **29.9** | **36.6** | **30.2** | **297.8** | **69.2** | **64.4** |

*** Significantly different from the control group value at $p \leq 0.05$**
**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.2 | 6.9 | 1752 | 1776 | 1776 | 1800 |
| 16732 | 1.700 | 14.0 | 6.7 | 1896 | 1800 | 1824 | 1824 |
| 16734 | 1.800 | 14.2 | 7.4 | 1776 | 1896 | 1800 | 1848 |
| 16735 | 1.800 | 14.4 | 7.1 | 1920 | 1776 | 1848 | 1800 |
| 16736 | 1.700 | 14.1 | 6.5 | 1944 | 1728 | 1872 | 1824 |
| 16737 | 1.750 | 14.2 | 6.9 | 1752 | 1680 | 1800 | 1704 |
| 16738 | 1.850 | 14.4 | 7.1 | 1848 | 1800 | 1872 | 1728 |
| 16740 | 1.700 | 14.0 | 7.3 | 1752 | 1608 | 1776 | 1656 |
| 16741 | 1.700 | 13.8 | 6.8 | 1800 | 1824 | 1800 | 1848 |
| 16742 | 1.800 | 14.3 | 7.2 | 1848 | 1776 | 1848 | 1680 |
| 16745 | 1.800 | 14.4 | 7.1 | 1848 | 1824 | 1992 | 1872 |
| 16746 | 1.750 | 14.3 | 6.6 | 1728 | 1728 | 1704 | 1776 |
| 16747 | 1.800 | 14.3 | 7.0 | 1752 | 1752 | 1824 | 1752 |
| 16749 | 1.900 | 14.6 | 7.1 | 1704 | 1728 | 1752 | 1776 |
| 16750 | 1.850 | 14.8 | 6.9 | 1872 | 1800 | 1968 | 1728 |
| 16753 | 1.800 | 14.1 | 7.5 | 1848 | 1776 | 1896 | 1776 |
| **MEAN** | **1.775** | **14.3** | **7.0** | **1815** | **1767** | **1835** | **1775** |
| **SD** | **0.063** | **0.2** | **0.3** | **72.7** | **65.5** | **74.9** | **62.9** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16823 | 1.750 | 14.5 | 7.0 | 1920 | 1872 | 1920 | 1896 |
| 16825 | 1.800 | 14.1 | 7.2 | 1800 | 1752 | 1752 | 1728 |
| 16826 | 1.800 | 14.5 | 6.8 | 1824 | 1848 | 1920 | 1800 |
| 16827 | 1.750 | 14.2 | 7.5 | 2136 | 1992 | 2016 | 1896 |
| 16828 | 1.820 | 14.6 | 7.0 | 1920 | 1848 | 1920 | 1872 |
| 16830 | 1.820 | 14.5 | 7.2 | 1944 | 1824 | 1968 | 1824 |
| 16831 | 1.800 | 14.4 | 6.9 | 1992 | 1944 | 1944 | 1872 |
| 16833 | 1.718 | 14.1 | 6.6 | 1776 | 1776 | 1800 | 1776 |
| 16834 | 1.715 | 14.0 | 7.0 | 1776 | 1752 | 1848 | 1752 |
| 16836 | 1.815 | 14.6 | 6.7 | 1968 | 1872 | 2016 | 1848 |
| 16837 | 1.800 | 14.1 | 7.0 | 1872 | 1824 | 1848 | 1896 |
| 16839 | 1.800 | 14.3 | 6.7 | 2064 | 1920 | 2016 | 1848 |
| 16840 | 1.815 | 14.3 | 7.3 | 1872 | 1824 | 1920 | 1872 |
| 16842 | 1.850 | 14.6 | 6.9 | 1848 | 1800 | 1848 | 1824 |
| 16843 | 1.750 | 14.3 | 6.7 | 1872 | 1800 | 1896 | 1800 |
| 16844 | 1.950 | 15.1 | 6.9 | 1872 | 1776 | 1896 | 1800 |
| **MEAN** | **1.797** | **14.4** | **6.9** | **1904*** | **1839*** | **1908*** | **1832*** |
| **SD** | **0.056** | **0.3** | **0.2** | **100.2** | **68.4** | **76.4** | **52.4** |

*** Significantly different from the control group value at $p \leq 0.05$**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 3024 | 3024 | 317 | 346 | 1392 | 1368 | 792 |
| 16732 | 2688 | 2736 | 192 | 192 | 1512 | 1512 | 888 |
| 16734 | 2736 | 3072 | 240 | 269 | 1512 | 1488 | 864 |
| 16735 | 2688 | 2784 | 240 | 230 | 1392 | 1392 | 816 |
| 16736 | 3120 | 3072 | 269 | 259 | 1320 | 1344 | 744 |
| 16737 | 2784 | 2736 | 202 | 192 | 1368 | 1368 | 792 |
| 16738 | 2880 | 2976 | 182 | 202 | 1392 | 1416 | 768 |
| 16740 | 2832 | 2832 | 211 | 211 | 1296 | 1200 | 720 |
| 16741 | 2928 | 2976 | 307 | 365 | 1392 | 1344 | 720 |
| 16742 | 2592 | 2784 | 202 | 192 | 1512 | 1464 | 888 |
| 16745 | 2784 | 2880 | 211 | 211 | 1368 | 1200 | 792 |
| 16746 | 2736 | 2640 | 182 | 163 | 1272 | 1320 | 720 |
| 16747 | 2832 | 2736 | 221 | 288 | 1440 | 1320 | 816 |
| 16749 | 2688 | 2736 | 163 | 163 | 1440 | 1392 | 768 |
| 16750 | 2784 | 2784 | 202 | 192 | 1296 | 1392 | 744 |
| 16753 | 3024 | 3024 | 240 | 250 | 1440 | 1320 | 840 |
| **MEAN** | **2820** | **2862** | **224** | **233** | **1397** | **1365** | **792** |
| **SD** | **144.0** | **141.6** | **43.5** | **59.9** | **77.0** | **86.7** | **56.8** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16823 | 2880 | 2880 | 211 | 221 | 1584 | 1632 | 936 |
| 16825 | 2688 | 2784 | 192 | 192 | 1416 | 1320 | 816 |
| 16826 | 2832 | 2736 | 230 | 221 | 1512 | 1416 | 888 |
| 16827 | 3120 | 3072 | 182 | 192 | 1512 | 1440 | 864 |
| 16828 | 2784 | 2880 | 134 | 144 | 1464 | 1464 | 816 |
| 16830 | 3120 | 3024 | 202 | 221 | 1464 | 1344 | 792 |
| 16831 | 3120 | 3024 | 221 | 230 | 1440 | 1440 | 792 |
| 16833 | 2928 | 2832 | 202 | 202 | 1416 | 1320 | 768 |
| 16834 | 2736 | 2784 | 163 | 173 | 1320 | 1272 | 744 |
| 16836 | 3024 | 2976 | 182 | 192 | 1536 | 1560 | 864 |
| 16837 | 2784 | 2784 | 250 | 221 | 1488 | 1464 | 864 |
| 16839 | 2976 | 3120 | 211 | 211 | 1512 | 1560 | 912 |
| 16840 | 3264 | 3264 | 288 | 307 | 1392 | 1368 | 792 |
| 16842 | 3168 | 3072 | 250 | 269 | 1584 | 1464 | 936 |
| 16843 | 3024 | 2976 | 240 | 269 | 1320 | --- | 792 |
| 16844 | 3024 | 2976 | 250 | 269 | 1584 | 1584 | 912 |
| **MEAN** | **2976*** | **2949** | **213** | **221** | **1472*** | **1443*** | **843*** |
| **SD** | **170.1** | **146.6** | **38.3** | **41.3** | **84.4** | **106.9** | **61.9** |

*** Significantly different from the control group value at $p \leq 0.05$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 1**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Male Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Corpus Callosa #2 (μ) Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 816 | 600 | 576 | 480 | 504 | 4416 | 192 | 192 |
| 16732 | 864 | 576 | 576 | 456 | 456 | 4656 | 192 | 192 |
| 16734 | 864 | 624 | 504 | 504 | 528 | 4608 | 192 | 192 |
| 16735 | 792 | 576 | 576 | 384 | 480 | 4608 | 202 | 202 |
| 16736 | 744 | 552 | 552 | 432 | 432 | 4176 | 182 | 182 |
| 16737 | 792 | 840 | 552 | 504 | 480 | 4368 | 230 | 240 |
| 16738 | 768 | 576 | 600 | 456 | 504 | 4368 | 125 | 144 |
| 16740 | 648 | 528 | 600 | 480 | 504 | 4656 | 182 | 192 |
| 16741 | 720 | 576 | 528 | 456 | 480 | 4416 | 163 | 154 |
| 16742 | 816 | 624 | 600 | 480 | 480 | 4512 | 173 | 173 |
| 16745 | 744 | 552 | 576 | 408 | 480 | 4656 | 173 | 173 |
| 16746 | 744 | 528 | 528 | 408 | 432 | 4080 | 211 | 211 |
| 16747 | 792 | 624 | 528 | 480 | 504 | 4272 | 192 | 192 |
| 16749 | 744 | 624 | 576 | 504 | 528 | 4992 | 211 | 221 |
| 16750 | 792 | 552 | 552 | 408 | 456 | 4368 | 192 | 192 |
| 16753 | 768 | 576 | 600 | 456 | 504 | 4512 | 192 | 192 |
| **MEAN** | **776** | **596** | **564** | **456** | **485** | **4479** | **188** | **190** |
| **SD** | **53.8** | **72.9** | **30.4** | **38.2** | **29.4** | **220.8** | **23.5** | **23.3** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Corpus Callosa #2 (μ) Left |
|---|---|---|---|---|---|---|---|---|
| 16823 | 960 | 648 | 576 | 480 | 432 | 4896 | 202 | 211 |
| 16825 | 744 | 576 | 576 | 504 | 504 | 4752 | 202 | 192 |
| 16826 | 744 | 624 | 648 | 480 | 504 | 4848 | 221 | 192 |
| 16827 | 816 | 624 | 600 | 480 | 480 | 4512 | 192 | 211 |
| 16828 | 792 | 552 | 600 | 480 | 480 | 4560 | 134 | 134 |
| 16830 | 768 | 600 | 624 | 480 | 480 | 4608 | 173 | 202 |
| 16831 | 792 | 648 | 576 | 384 | 552 | 4608 | 326 | 346 |
| 16833 | 744 | 600 | 552 | 432 | 480 | 4368 | 221 | 211 |
| 16834 | 720 | 528 | 528 | 408 | 504 | 4416 | 173 | 182 |
| 16836 | 912 | 648 | 600 | 432 | 456 | 4416 | 288 | 269 |
| 16837 | 816 | 600 | 600 | 456 | 504 | 4752 | 230 | 230 |
| 16839 | 912 | 600 | 600 | 480 | 504 | 4560 | 221 | 192 |
| 16840 | 792 | 576 | 600 | 480 | 552 | 4320 | 211 | 192 |
| 16842 | 840 | 624 | 648 | 456 | 480 | 4800 | 240 | 230 |
| 16843 | 672 | 600 | 552 | 480 | 480 | 4848 | 211 | 202 |
| 16844 | 912 | 624 | 600 | 528 | 552 | 4896 | 230 | 230 |
| **MEAN** | **809** | **605** | **593*** | **465** | **497** | **4635** | **217** | **214** |
| **SD** | **80.7** | **34.2** | **32.5** | **36.0** | **33.6** | **195.9** | **44.6** | **45.3** |

* **Significantly different from the control group value at $p \leq 0.05$**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.5 | 7.0 | 1968 | 1824 | 1944 | 1800 |
| 16732 | 1.800 | 14.6 | 6.6 | 1800 | 1728 | 1800 | 1728 |
| 16734 | 1.750 | 14.2 | 7.3 | 2112 | 1944 | 1968 | 2040 |
| 16735 | 1.750 | 14.4 | 7.0 | 1920 | 1920 | 1920 | 1872 |
| 16736 | 1.650 | 14.0 | 6.7 | 1896 | 1800 | 1848 | 1776 |
| 16737 | 1.700 | 14.0 | 7.1 | 1848 | 1824 | 1944 | 1872 |
| 16738 | 1.800 | 14.3 | 7.1 | 1896 | 1752 | 1872 | 1776 |
| 16740 | 1.700 | 14.1 | 6.8 | 1824 | 1992 | 1704 | 1920 |
| 16741 | 1.600 | 13.7 | 7.0 | 1824 | 1872 | 1800 | 1824 |
| 16742 | 1.600 | 13.6 | 7.1 | 1752 | 1656 | 1704 | 1608 |
| 16745 | 1.700 | 13.9 | 6.3 | 1872 | 1824 | 1824 | 1800 |
| 16746 | 1.600 | 13.6 | 6.3 | 1968 | 1992 | 1848 | 1944 |
| 16747 | 1.800 | 14.0 | 7.2 | 1872 | 1848 | 1944 | 1896 |
| 16749 | 1.800 | 14.3 | 6.8 | 1848 | 1872 | 1872 | 1800 |
| 16750 | 1.700 | 13.7 | 6.9 | 1728 | 1824 | 1848 | 1800 |
| 16753 | 1.600 | 13.6 | 7.1 | 1896 | 1896 | 1824 | 1872 |
| **MEAN** | **1.703** | **14.0** | **6.9** | **1877** | **1848** | **1854** | **1833** |
| **SD** | **0.076** | **0.3** | **0.3** | **91.6** | **91.1** | **79.6** | **97.9** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16755 | 1.650 | 14.0 | 6.9 | 1872 | 1800 | 1848 | 1752 |
| 16758 | 1.800 | 14.2 | 6.9 | 1824 | 1872 | 1872 | 1872 |
| 16760 | 1.650 | 13.7 | 6.8 | 1800 | 1776 | 1800 | 1824 |
| 16761 | 1.800 | 14.4 | 7.0 | 1776 | 1752 | 1752 | 1752 |
| 16762 | 1.175 | 14.0 | 6.7 | 1680 | 1704 | 1680 | 1680 |
| 16763 | 1.735 | 14.2 | 7.2 | 1872 | 1872 | 1920 | 1920 |
| 16764 | 1.700 | 14.1 | 7.2 | 1800 | 1800 | 1800 | 1800 |
| 16765 | 1.750 | 14.5 | 7.2 | 1704 | 1776 | 1680 | 1680 |
| 16767 | 1.865 | 14.6 | 7.1 | 1800 | 1848 | 1752 | 1752 |
| 16768 | 1.845 | 14.1 | 7.1 | 1824 | 1848 | 1896 | 1872 |
| 16769 | 1.765 | 14.3 | 7.5 | 1800 | 1728 | 1848 | 1776 |
| 16770 | 1.760 | 14.1 | 7.4 | 1920 | 1848 | 1920 | 1884 |
| 16771 | 1.650 | 13.5 | 7.2 | 1776 | 1704 | 1728 | 1704 |
| 16773 | 1.800 | 14.5 | 7.0 | 1968 | 1896 | 1752 | 1920 |
| 16774 | 1.700 | 14.4 | 7.0 | 1848 | 1800 | 1800 | 1800 |
| 16776 | 1.635 | 13.9 | 6.8 | 1824 | 1680 | 1824 | 1752 |
| **MEAN** | **1.705** | **14.2** | **7.1** | **1818** | **1794** | **1805** | **1796** |
| **SD** | **0.158** | **0.3** | **0.2** | **71.5** | **67.0** | **77.0** | **79.3** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 2832 | 3024 | 182 | 173 | 1320 | 1344 | 768 |
| 16732 | 3216 | 3216 | 221 | 240 | 1272 | 1272 | 792 |
| 16734 | 3360 | 3360 | 250 | 278 | 1608 | 1656 | 912 |
| 16735 | 2928 | 3024 | 182 | 173 | 1368 | 1368 | 768 |
| 16736 | 2976 | 2928 | 221 | 230 | 1416 | 1416 | 816 |
| 16737 | 3072 | 3072 | 230 | 211 | 1440 | 1248 | 840 |
| 16738 | 3024 | 2880 | 278 | 250 | 1416 | 1440 | 816 |
| 16740 | 2880 | 2928 | 221 | 221 | 1224 | ---- | 696 |
| 16741 | 2928 | 2976 | 221 | 211 | 1488 | 1536 | 840 |
| 16742 | 3024 | 2688 | 298 | 336 | 1392 | 1344 | 816 |
| 16745 | 2976 | 2928 | 192 | 202 | 1440 | 1416 | 816 |
| 16746 | 2880 | 2880 | 182 | 182 | 1296 | 1296 | 720 |
| 16747 | 2928 | 3072 | 202 | 230 | 1512 | 1416 | 816 |
| 16749 | 3024 | 3024 | 182 | 163 | 1488 | 1416 | 840 |
| 16750 | 2928 | 2880 | 269 | 250 | 1368 | 1368 | 792 |
| 16753 | 2880 | 2880 | 163 | 173 | 1392 | 1440 | 792 |
| **MEAN** | **2991** | **2985** | **218** | **220** | **1403** | **1398** | **803** |
| **SD** | **135.4** | **154.0** | **39.0** | **45.5** | **97.2** | **102.4** | **50.3** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16755 | 2832 | 2784 | 192 | 192 | 1392 | 1392 | 816 |
| 16758 | 2832 | 2784 | 240 | 221 | 1440 | 1440 | 864 |
| 16760 | 2544 | 2640 | 202 | 192 | 1344 | 1296 | 768 |
| 16761 | 2688 | 2544 | 163 | 173 | 1272 | 1248 | 720 |
| 16762 | 2544 | 2496 | 154 | 163 | 1224 | ---- | 720 |
| 16763 | 2928 | 2784 | 115 | 106 | 1440 | 1488 | 816 |
| 16764 | 2688 | 2688 | 192 | 173 | 1344 | 1392 | 768 |
| 16765 | 2544 | 2544 | 163 | 154 | 1392 | 1368 | 792 |
| 16767 | 2736 | 2640 | 163 | 173 | 1512 | 1464 | 888 |
| 16768 | 2736 | 2736 | 211 | 211 | 1344 | 1344 | 744 |
| 16769 | 2544 | 2640 | 221 | 202 | 1224 | 1272 | 720 |
| 16770 | 2784 | 2736 | 202 | 211 | 1416 | 1344 | 816 |
| 16771 | 2640 | 2592 | 192 | 182 | 1344 | 1392 | 768 |
| 16773 | 2688 | 2640 | 192 | 173 | 1464 | 1440 | 840 |
| 16774 | 2544 | 2640 | 173 | 144 | 1392 | 1320 | 816 |
| 16776 | 2688 | 2688 | 192 | 192 | 1368 | 1368 | 816 |
| **MEAN** | **2685**** | **2661**** | **185** | **179*** | **1370** | **1371** | **792** |
| **SD** | **120.8** | **89.3** | **29.7** | **28.8** | **80.5** | **69.6** | **51.2** |

*** Significantly different from the control group value at $p \leq 0.05$**

**** Significantly different from the control group value at $p \leq 0.01$**

**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 768 | 600 | 624 | 456 | 456 | 4656 | 163 | 163 |
| 16732 | 720 | 576 | 552 | 456 | 480 | 4896 | 211 | 221 |
| 16734 | 936 | 696 | 672 | 456 | 480 | 4800 | 144 | 144 |
| 16735 | 744 | 648 | 600 | 480 | 504 | 4464 | 202 | 202 |
| 16736 | 840 | 576 | 576 | 408 | 408 | 4320 | 202 | 202 |
| 16737 | 720 | 624 | 648 | 480 | 552 | 4752 | 230 | 221 |
| 16738 | 816 | 576 | 648 | 504 | 528 | 4896 | 211 | 211 |
| 16740 | 672 | 528 | ---- | 384 | 360 | 4704 | 154 | 144 |
| 16741 | 912 | 600 | 648 | 456 | 504 | 4752 | 221 | 230 |
| 16742 | 792 | 576 | 600 | 480 | 480 | 4128 | 202 | 192 |
| 16745 | 792 | 600 | 648 | 456 | 480 | 4656 | 182 | 182 |
| 16746 | 720 | 576 | 576 | 408 | 384 | 4560 | 154 | 154 |
| 16747 | 792 | 696 | 672 | 576 | 600 | 5088 | 202 | 202 |
| 16749 | 768 | 576 | 600 | 504 | 600 | 4608 | 192 | 173 |
| 16750 | 768 | 552 | 552 | 480 | 480 | 5136 | 221 | 230 |
| 16753 | 744 | 552 | 576 | 432 | 432 | 4656 | 192 | 211 |
| **MEAN** | **782** | **597** | **613** | **464** | **483** | **4692** | **193** | **193** |
| **SD** | **69.5** | **47.9** | **41.4** | **45.3** | **67.8** | **257.3** | **26.3** | **29.4** |

**Maternal Dosage Group II (0.01 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16755 | 792 | 600 | 576 | 360 | 384 | 4848 | 269 | 278 |
| 16758 | 840 | 600 | 600 | 456 | 432 | 4992 | 298 | 307 |
| 16760 | 744 | 552 | 552 | 432 | 408 | 4704 | 192 | 202 |
| 16761 | 720 | 528 | 504 | 456 | 552 | 5136 | 202 | 182 |
| 16762 | ---- | 576 | ---- | 432 | ---- | 4512 | 115 | 115 |
| 16763 | 720 | 648 | 624 | 456 | 456 | 4896 | 163 | 163 |
| 16764 | 792 | 576 | 576 | 456 | 480 | 5280 | 211 | 202 |
| 16765 | 792 | 576 | 576 | 480 | 480 | 4896 | 192 | 192 |
| 16767 | 864 | 624 | 600 | 528 | 528 | 4944 | 182 | 202 |
| 16768 | 768 | 600 | 552 | 384 | 432 | 5232 | 278 | 259 |
| 16769 | 768 | 528 | 504 | 408 | 408 | 5088 | 182 | 163 |
| 16770 | 792 | 600 | 576 | 456 | 456 | 5232 | 211 | 221 |
| 16771 | 840 | 576 | 576 | 456 | 456 | 4800 | 192 | 202 |
| 16773 | 816 | 624 | 624 | 432 | 432 | 4992 | 230 | 221 |
| 16774 | 792 | 600 | 552 | 408 | 408 | 5088 | 298 | 307 |
| 16776 | 816 | 552 | 552 | 384 | 432 | 4752 | 240 | 240 |
| **MEAN** | **790** | **585** | **570**** | **437** | **450** | **4962**** | **216** | **216** |
| **SD** | **42.0** | **33.8** | **35.7** | **41.3** | **45.8** | **211.7** | **50.4** | **52.4** |

**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.5 | 7.0 | 1968 | 1824 | 1944 | 1800 |
| 16732 | 1.800 | 14.6 | 6.6 | 1800 | 1728 | 1800 | 1728 |
| 16734 | 1.750 | 14.2 | 7.3 | 2112 | 1944 | 1968 | 2040 |
| 16735 | 1.750 | 14.4 | 7.0 | 1920 | 1920 | 1920 | 1872 |
| 16736 | 1.650 | 14.0 | 6.7 | 1896 | 1800 | 1848 | 1776 |
| 16737 | 1.700 | 14.0 | 7.1 | 1848 | 1824 | 1944 | 1872 |
| 16738 | 1.800 | 14.3 | 7.1 | 1896 | 1752 | 1872 | 1776 |
| 16740 | 1.700 | 14.1 | 6.8 | 1824 | 1992 | 1704 | 1920 |
| 16741 | 1.600 | 13.7 | 7.0 | 1824 | 1872 | 1800 | 1824 |
| 16742 | 1.600 | 13.6 | 7.1 | 1752 | 1656 | 1704 | 1608 |
| 16745 | 1.700 | 13.9 | 6.3 | 1872 | 1824 | 1824 | 1800 |
| 16746 | 1.600 | 13.6 | 6.3 | 1968 | 1992 | 1848 | 1944 |
| 16747 | 1.800 | 14.0 | 7.2 | 1872 | 1848 | 1944 | 1896 |
| 16749 | 1.800 | 14.3 | 6.8 | 1848 | 1872 | 1872 | 1800 |
| 16750 | 1.700 | 13.7 | 6.9 | 1728 | 1824 | 1848 | 1800 |
| 16753 | 1.600 | 13.6 | 7.1 | 1896 | 1896 | 1824 | 1872 |
| **MEAN** | **1.703** | **14.0** | **6.9** | **1877** | **1848** | **1854** | **1833** |
| **SD** | **0.076** | **0.3** | **0.3** | **91.6** | **91.1** | **79.6** | **97.9** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16781 | 1.715 | 14.5 | 6.8 | 1776 | 1776 | 1824 | 1848 |
| 16782 | 1.750 | 14.0 | 6.8 | 1848 | 1920 | 1800 | 1920 |
| 16783 | 1.600 | 13.6 | 6.6 | 1632 | 1680 | 1680 | 1728 |
| 16784 | 1.950 | 14.7 | 7.3 | 1896 | 1896 | 1872 | 1800 |
| 16786 | 1.800 | 14.5 | 6.9 | 1800 | 1824 | 1776 | 1776 |
| 16787 | 1.750 | 14.4 | 7.1 | 1656 | 1704 | 1776 | 1872 |
| 16791 | 1.750 | 14.5 | 7.2 | 1896 | 1680 | 1824 | 1800 |
| 16792 | 1.700 | 14.0 | 6.8 | 1896 | 1824 | 1992 | 1872 |
| 16793 | 1.800 | 14.6 | 7.1 | 1752 | 1728 | 1824 | 1848 |
| 16794 | 1.815 | 14.3 | 7.3 | 1872 | 1872 | 1920 | 1800 |
| 16795 | 1.625 | 13.8 | 6.5 | 1728 | 1752 | 1848 | 1824 |
| 16796 | 1.800 | 14.2 | 7.2 | 1848 | 1800 | 1824 | 1848 |
| 16797 | 1.815 | 14.7 | 7.3 | 1872 | 1824 | 1848 | 1776 |
| 16798 | 1.665 | 14.2 | 6.5 | 1776 | 1776 | 1680 | 1728 |
| 16799 | 1.640 | 14.0 | 6.8 | 1920 | 1896 | 1920 | 1872 |
| **MEAN** | **1.745** | **14.3** | **6.9** | **1811** | **1797** | **1827** | **1821** |
| **SD** | **0.091** | **0.3** | **0.3** | **89.7** | **78.5** | **83.1** | **55.1** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 2832 | 3024 | 182 | 173 | 1320 | 1344 | 768 |
| 16732 | 3216 | 3216 | 221 | 240 | 1272 | 1272 | 792 |
| 16734 | 3360 | 3360 | 250 | 278 | 1608 | 1656 | 912 |
| 16735 | 2928 | 3024 | 182 | 173 | 1368 | 1368 | 768 |
| 16736 | 2976 | 2928 | 221 | 230 | 1416 | 1416 | 816 |
| 16737 | 3072 | 3072 | 230 | 211 | 1440 | 1248 | 840 |
| 16738 | 3024 | 2880 | 278 | 250 | 1416 | 1440 | 816 |
| 16740 | 2880 | 2928 | 221 | 221 | 1224 | ---- | 696 |
| 16741 | 2928 | 2976 | 221 | 211 | 1488 | 1536 | 840 |
| 16742 | 3024 | 2688 | 298 | 336 | 1392 | 1344 | 816 |
| 16745 | 2976 | 2928 | 192 | 202 | 1440 | 1416 | 816 |
| 16746 | 2880 | 2880 | 182 | 182 | 1296 | 1296 | 720 |
| 16747 | 2928 | 3072 | 202 | 230 | 1512 | 1416 | 816 |
| 16749 | 3024 | 3024 | 182 | 163 | 1488 | 1416 | 840 |
| 16750 | 2928 | 2880 | 269 | 250 | 1368 | 1368 | 792 |
| 16753 | 2880 | 2880 | 163 | 173 | 1392 | 1440 | 792 |
| **MEAN** | **2991** | **2985** | **218** | **220** | **1403** | **1398** | **803** |
| **SD** | **135.4** | **154.0** | **39.0** | **45.5** | **97.2** | **102.4** | **50.3** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16781 | 2880 | 2832 | 240 | 240 | 1296 | 1296 | 768 |
| 16782 | 2928 | 2832 | 230 | 250 | 1368 | 1440 | 768 |
| 16783 | 2496 | 2544 | 221 | 230 | 1272 | 1272 | 744 |
| 16784 | 2640 | 2640 | 259 | 278 | 1464 | 1656 | 840 |
| 16786 | 2736 | 2688 | 202 | 230 | 1344 | 1416 | 792 |
| 16787 | 2640 | 2592 | 240 | 250 | 1320 | 1344 | 768 |
| 16791 | 2640 | 2640 | 221 | 221 | 1272 | 1320 | 720 |
| 16792 | 2880 | 3024 | 192 | 202 | 1344 | 1344 | 816 |
| 16793 | 2784 | 2880 | 230 | 230 | 1440 | 1416 | 840 |
| 16794 | 2688 | 2736 | 298 | 298 | 1368 | 1392 | 768 |
| 16795 | 2832 | 2784 | 269 | 278 | 1320 | 1296 | 720 |
| 16796 | 2736 | 2688 | 269 | 240 | 1368 | 1392 | 768 |
| 16797 | 2736 | 2736 | 259 | 240 | 1368 | 1344 | 768 |
| 16798 | 2592 | 2592 | 163 | 154 | 1320 | 1320 | 768 |
| 16799 | 3024 | 2784 | 192 | 202 | 1440 | 1440 | 816 |
| **MEAN** | **2749**** | **2733**** | **232** | **236** | **1354** | **1379** | **778** |
| **SD** | **141.1** | **127.6** | **35.6** | **35.0** | **58.6** | **93.8** | **37.2** |

**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 768 | 600 | 624 | 456 | 456 | 4656 | 163 | 163 |
| 16732 | 720 | 576 | 552 | 456 | 480 | 4896 | 211 | 221 |
| 16734 | 936 | 696 | 672 | 456 | 480 | 4800 | 144 | 144 |
| 16735 | 744 | 648 | 600 | 480 | 504 | 4464 | 202 | 202 |
| 16736 | 840 | 576 | 576 | 408 | 408 | 4320 | 202 | 202 |
| 16737 | 720 | 624 | 648 | 480 | 552 | 4752 | 230 | 221 |
| 16738 | 816 | 576 | 648 | 504 | 528 | 4896 | 211 | 211 |
| 16740 | 672 | 528 | ---- | 384 | 360 | 4704 | 154 | 144 |
| 16741 | 912 | 600 | 648 | 456 | 504 | 4752 | 221 | 230 |
| 16742 | 792 | 576 | 600 | 480 | 480 | 4128 | 202 | 192 |
| 16745 | 792 | 600 | 648 | 456 | 480 | 4656 | 182 | 182 |
| 16746 | 720 | 576 | 576 | 408 | 384 | 4560 | 154 | 154 |
| 16747 | 792 | 696 | 672 | 576 | 600 | 5088 | 202 | 202 |
| 16749 | 768 | 576 | 600 | 504 | 600 | 4608 | 192 | 173 |
| 16750 | 768 | 552 | 552 | 480 | 480 | 5136 | 221 | 230 |
| 16753 | 744 | 552 | 576 | 432 | 432 | 4656 | 192 | 211 |
| **MEAN** | **782** | **597** | **613** | **464** | **483** | **4692** | **193** | **193** |
| **SD** | **69.5** | **47.9** | **41.4** | **45.3** | **67.8** | **257.3** | **26.3** | **29.4** |

**Maternal Dosage Group III (0.1 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16781 | 768 | 528 | 528 | 384 | 384 | 4656 | 240 | 240 |
| 16782 | 840 | 600 | 600 | 408 | 432 | 4896 | 374 | 374 |
| 16783 | 720 | 528 | 552 | 384 | 384 | 4704 | 182 | 192 |
| 16784 | 984 | 648 | 648 | 432 | 504 | 4800 | 490 | 442 |
| 16786 | 840 | 576 | 576 | 432 | 480 | 4512 | 250 | 259 |
| 16787 | 768 | 552 | 552 | 408 | 432 | 4512 | 336 | 336 |
| 16791 | 768 | 528 | 528 | 432 | 480 | 5088 | 202 | 182 |
| 16792 | 768 | 600 | 600 | 360 | 360 | 5136 | 374 | 384 |
| 16793 | 816 | 600 | 600 | 456 | 432 | 4560 | 269 | 259 |
| 16794 | 768 | 552 | 600 | 456 | 480 | 5136 | 221 | 230 |
| 16795 | 720 | 600 | 576 | 384 | 360 | 4896 | 442 | 403 |
| 16796 | 792 | 600 | 576 | 432 | 432 | 5232 | 221 | 211 |
| 16797 | 768 | 576 | 576 | 408 | 432 | 5088 | 221 | 230 |
| 16798 | 768 | 552 | 552 | 408 | 408 | 4512 | 154 | 134 |
| 16799 | 840 | 624 | 600 | 432 | 432 | 4896 | 202 | 202 |
| **MEAN** | **795** | **578** | **578*** | **414**** | **429*** | **4842** | **279**** | **272**** |
| **SD** | **64.7** | **36.8** | **32.0** | **27.9** | **44.3** | **255.8** | **100.7** | **92.6** |

* **Significantly different from the control group value at $p \leq 0.05$**
** **Significantly different from the control group value at $p \leq 0.01$**

## TABLE 2

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.5 | 7.0 | 1968 | 1824 | 1944 | 1800 |
| 16732 | 1.800 | 14.6 | 6.6 | 1800 | 1728 | 1800 | 1728 |
| 16734 | 1.750 | 14.2 | 7.3 | 2112 | 1944 | 1968 | 2040 |
| 16735 | 1.750 | 14.4 | 7.0 | 1920 | 1920 | 1920 | 1872 |
| 16736 | 1.650 | 14.0 | 6.7 | 1896 | 1800 | 1848 | 1776 |
| 16737 | 1.700 | 14.0 | 7.1 | 1848 | 1824 | 1944 | 1872 |
| 16738 | 1.800 | 14.3 | 7.1 | 1896 | 1752 | 1872 | 1776 |
| 16740 | 1.700 | 14.1 | 6.8 | 1824 | 1992 | 1704 | 1920 |
| 16741 | 1.600 | 13.7 | 7.0 | 1824 | 1872 | 1800 | 1824 |
| 16742 | 1.600 | 13.6 | 7.1 | 1752 | 1656 | 1704 | 1608 |
| 16745 | 1.700 | 13.9 | 6.3 | 1872 | 1824 | 1824 | 1800 |
| 16746 | 1.600 | 13.6 | 6.3 | 1968 | 1992 | 1848 | 1944 |
| 16747 | 1.800 | 14.0 | 7.2 | 1872 | 1848 | 1944 | 1896 |
| 16749 | 1.800 | 14.3 | 6.8 | 1848 | 1872 | 1872 | 1800 |
| 16750 | 1.700 | 13.7 | 6.9 | 1728 | 1824 | 1848 | 1800 |
| 16753 | 1.600 | 13.6 | 7.1 | 1896 | 1896 | 1824 | 1872 |
| **MEAN** | **1.703** | **14.0** | **6.9** | **1877** | **1848** | **1854** | **1833** |
| **SD** | **0.076** | **0.3** | **0.3** | **91.6** | **91.1** | **79.6** | **97.9** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16800 | 1.700 | 14.0 | 6.7 | 1752 | 1728 | 1752 | 1752 |
| 16801 | 1.750 | 14.2 | 6.8 | 1800 | 1896 | 1848 | 1848 |
| 16802 | 1.715 | 14.1 | 6.7 | 1800 | 1824 | 1872 | 1848 |
| 16803 | 1.800 | 14.9 | 7.0 | 1824 | 1824 | 1800 | 1800 |
| 16805 | 1.825 | 14.5 | 6.9 | 1896 | 1968 | 1872 | 1992 |
| 16806 | 1.835 | 14.7 | 6.9 | 1896 | 2040 | 1872 | 1944 |
| 16807 | 1.750 | 14.3 | 7.0 | 1920 | 1872 | 1896 | 1872 |
| 16808 | 1.700 | 13.8 | 6.7 | 1920 | 1848 | 1920 | 1848 |
| 16810 | 1.750 | 13.9 | 7.1 | 1920 | 1920 | 1896 | 1896 |
| 16811 | 1.800 | 14.2 | 7.1 | 1824 | 1872 | 1848 | 1872 |
| 16814 | 1.800 | 14.5 | 7.3 | 1728 | 1680 | 1704 | 1680 |
| 16815 | 1.725 | 13.9 | 7.1 | 1728 | 1680 | 1728 | 1632 |
| 16817 | 1.750 | 14.6 | 7.0 | 1824 | ---- | 1752 | 1728 |
| 16818 | 1.725 | 14.3 | 7.0 | 1704 | 1800 | 1680 | 1776 |
| 16820 | 1.715 | 14.4 | 6.9 | 1752 | 1872 | 1824 | 1776 |
| 16822 | 1.900 | 14.6 | 7.2 | 1896 | 1848 | 1920 | 1872 |
| **MEAN** | **1.764** | **14.3** | **7.0** | **1824** | **1845** | **1824** | **1821** |
| **SD** | **0.056** | **0.3** | **0.2** | **76.4** | **98.1** | **78.4** | **94.3** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 2832 | 3024 | 182 | 173 | 1320 | 1344 | 768 |
| 16732 | 3216 | 3216 | 221 | 240 | 1272 | 1272 | 792 |
| 16734 | 3360 | 3360 | 250 | 278 | 1608 | 1656 | 912 |
| 16735 | 2928 | 3024 | 182 | 173 | 1368 | 1368 | 768 |
| 16736 | 2976 | 2928 | 221 | 230 | 1416 | 1416 | 816 |
| 16737 | 3072 | 3072 | 230 | 211 | 1440 | 1248 | 840 |
| 16738 | 3024 | 2880 | 278 | 250 | 1416 | 1440 | 816 |
| 16740 | 2880 | 2928 | 221 | 221 | 1224 | ---- | 696 |
| 16741 | 2928 | 2976 | 221 | 211 | 1488 | 1536 | 840 |
| 16742 | 3024 | 2688 | 298 | 336 | 1392 | 1344 | 816 |
| 16745 | 2976 | 2928 | 192 | 202 | 1440 | 1416 | 816 |
| 16746 | 2880 | 2880 | 182 | 182 | 1296 | 1296 | 720 |
| 16747 | 2928 | 3072 | 202 | 230 | 1512 | 1416 | 816 |
| 16749 | 3024 | 3024 | 182 | 163 | 1488 | 1416 | 840 |
| 16750 | 2928 | 2880 | 269 | 250 | 1368 | 1368 | 792 |
| 16753 | 2880 | 2880 | 163 | 173 | 1392 | 1440 | 792 |
| **MEAN** | **2991** | **2985** | **218** | **220** | **1403** | **1398** | **802** |
| **SD** | **135.4** | **154.0** | **39.0** | **45.5** | **97.2** | **102.4** | **50.3** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16800 | 2832 | 2688 | 192 | 202 | 1296 | 1320 | 720 |
| 16801 | 2688 | 2784 | 192 | 202 | 1440 | 1464 | 720 |
| 16802 | 2880 | 2832 | 211 | 211 | 1416 | 1464 | 816 |
| 16803 | 2640 | 2688 | 230 | 240 | 1560 | 1536 | 864 |
| 16805 | 2928 | 2832 | 230 | 230 | ---- | 1464 | 816 |
| 16806 | 3120 | 3168 | 211 | 221 | 1464 | 1512 | 840 |
| 16807 | 2832 | 2880 | 211 | 202 | 1368 | 1416 | 768 |
| 16808 | 2784 | 2736 | 259 | 269 | 1440 | 1464 | 840 |
| 16810 | 2880 | 2880 | 192 | 182 | 1464 | 1464 | 792 |
| 16811 | 2736 | 2784 | 230 | 211 | 1320 | 1416 | 792 |
| 16814 | 2832 | 2832 | 240 | 211 | 1440 | 1440 | 864 |
| 16815 | 2640 | 2640 | 211 | 221 | 1416 | 1488 | 816 |
| 16817 | 2688 | 2592 | 154 | 154 | 1368 | 1368 | 744 |
| 16818 | 2544 | 2640 | 182 | 182 | 1344 | 1368 | 768 |
| 16820 | 2784 | 2688 | 250 | 250 | 1416 | 1344 | 816 |
| 16822 | 2832 | 2880 | 269 | 288 | 1392 | 1488 | 792 |
| **MEAN** | **2790**** | **2784**** | **217** | **217** | **1410** | **1438** | **798** |
| **SD** | **136.8** | **139.1** | **30.4** | **33.4** | **65.7** | **61.6** | **45.1** |

**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 768 | 600 | 624 | 456 | 456 | 4656 | 163 | 163 |
| 16732 | 720 | 576 | 552 | 456 | 480 | 4896 | 211 | 221 |
| 16734 | 936 | 696 | 672 | 456 | 480 | 4800 | 144 | 144 |
| 16735 | 744 | 648 | 600 | 480 | 504 | 4464 | 202 | 202 |
| 16736 | 840 | 576 | 576 | 408 | 408 | 4320 | 202 | 202 |
| 16737 | 720 | 624 | 648 | 480 | 552 | 4752 | 230 | 221 |
| 16738 | 816 | 576 | 648 | 504 | 528 | 4896 | 211 | 211 |
| 16740 | 672 | 528 | ---- | 384 | 360 | 4704 | 154 | 144 |
| 16741 | 912 | 600 | 648 | 456 | 504 | 4752 | 221 | 230 |
| 16742 | 792 | 576 | 600 | 480 | 480 | 4128 | 202 | 192 |
| 16745 | 792 | 600 | 648 | 456 | 480 | 4656 | 182 | 182 |
| 16746 | 720 | 576 | 576 | 408 | 384 | 4560 | 154 | 154 |
| 16747 | 792 | 696 | 672 | 576 | 600 | 5088 | 202 | 202 |
| 16749 | 768 | 576 | 600 | 504 | 600 | 4608 | 192 | 173 |
| 16750 | 768 | 552 | 552 | 480 | 480 | 5136 | 221 | 230 |
| 16753 | 744 | 552 | 576 | 432 | 432 | 4656 | 192 | 211 |
| **MEAN** | **782** | **597** | **613** | **464** | **483** | **4692** | **193** | **193** |
| **SD** | **69.5** | **47.9** | **41.4** | **45.3** | **67.8** | **257.3** | **26.3** | **29.4** |

**Maternal Dosage Group IV (1.0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16800 | 768 | 528 | 528 | 408 | 432 | 4992 | 202 | 202 |
| 16801 | 840 | 600 | 600 | 456 | 432 | 5184 | 269 | 269 |
| 16802 | 840 | 576 | 600 | 480 | 456 | 4944 | 230 | 230 |
| 16803 | 864 | 624 | 624 | 504 | 480 | 4752 | 221 | 221 |
| 16805 | 840 | 648 | 648 | 504 | 480 | 5328 | 202 | 182 |
| 16806 | 840 | 600 | 624 | 456 | 480 | 5136 | 250 | 250 |
| 16807 | 816 | 600 | 600 | 384 | 456 | 4944 | 240 | 250 |
| 16808 | 864 | 624 | 600 | 456 | 456 | 5088 | 269 | 269 |
| 16810 | 840 | 576 | 600 | 432 | 408 | 5088 | 240 | 250 |
| 16811 | 816 | 576 | 600 | 456 | 456 | 5040 | 250 | 278 |
| 16814 | 840 | 576 | 600 | 480 | 480 | 4800 | 240 | 250 |
| 16815 | 864 | 576 | 576 | 432 | 480 | 4992 | 182 | 173 |
| 16817 | 768 | 576 | 552 | 408 | 408 | 4848 | 202 | 202 |
| 16818 | 792 | 528 | 576 | 456 | 456 | 4992 | 173 | 182 |
| 16820 | 744 | 576 | 504 | 456 | 408 | 5088 | 278 | 240 |
| 16822 | 840 | 600 | 576 | 480 | 504 | 5232 | 173 | 163 |
| **MEAN** | **824** | **586** | **588** | **453** | **454** | **5028**** | **226** | **226** |
| **SD** | **36.9** | **31.6** | **36.1** | **33.8** | **29.7** | **154.3** | **34.2** | **37.1** |

**** Significantly different from the control group value at $p \leq 0.01$**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 1.700 | 14.5 | 7.0 | 1968 | 1824 | 1944 | 1800 |
| 16732 | 1.800 | 14.6 | 6.6 | 1800 | 1728 | 1800 | 1728 |
| 16734 | 1.750 | 14.2 | 7.3 | 2112 | 1944 | 1968 | 2040 |
| 16735 | 1.750 | 14.4 | 7.0 | 1920 | 1920 | 1920 | 1872 |
| 16736 | 1.650 | 14.0 | 6.7 | 1896 | 1800 | 1848 | 1776 |
| 16737 | 1.700 | 14.0 | 7.1 | 1848 | 1824 | 1944 | 1872 |
| 16738 | 1.800 | 14.3 | 7.1 | 1896 | 1752 | 1872 | 1776 |
| 16740 | 1.700 | 14.1 | 6.8 | 1824 | 1992 | 1704 | 1920 |
| 16741 | 1.600 | 13.7 | 7.0 | 1824 | 1872 | 1800 | 1824 |
| 16742 | 1.600 | 13.6 | 7.1 | 1752 | 1656 | 1704 | 1608 |
| 16745 | 1.700 | 13.9 | 6.3 | 1872 | 1824 | 1824 | 1800 |
| 16746 | 1.600 | 13.6 | 6.3 | 1968 | 1992 | 1848 | 1944 |
| 16747 | 1.800 | 14.0 | 7.2 | 1872 | 1848 | 1944 | 1896 |
| 16749 | 1.800 | 14.3 | 6.8 | 1848 | 1872 | 1872 | 1800 |
| 16750 | 1.700 | 13.7 | 6.9 | 1728 | 1824 | 1848 | 1800 |
| 16753 | 1.600 | 13.6 | 7.1 | 1896 | 1896 | 1824 | 1872 |
| **MEAN** | **1.703** | **14.0** | **6.9** | **1877** | **1848** | **1854** | **1833** |
| **SD** | **0.076** | **0.3** | **0.3** | **91.6** | **91.1** | **79.6** | **97.9** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Brain Weight (g) | Ant/Post Cerebrum (mm) | Ant/Post Cerebellum (mm) | Right Frontal Cortex (μ) | Left Frontal Cortex (μ) | Right Parietal Cortex (μ) | Left Parietal Cortex (μ) |
|---|---|---|---|---|---|---|---|
| 16823 | 1.820 | 14.3 | 7.3 | 1968 | 2064 | 2016 | 2040 |
| 16825 | 1.700 | 13.9 | 7.1 | 2112 | 2040 | 2016 | 1968 |
| 16826 | 1.800 | 14.4 | 7.1 | 1872 | 1872 | 1920 | 1848 |
| 16827 | 1.715 | 14.0 | 7.1 | 1776 | 1704 | 1800 | 1728 |
| 16828 | 1.750 | 14.1 | 7.1 | 1920 | 1872 | 1920 | 1872 |
| 16830 | 1.800 | 14.1 | 7.2 | 1920 | 1920 | 1824 | 1824 |
| 16831 | 1.800 | 14.2 | 7.4 | 1920 | 1944 | 1848 | 1920 |
| 16833 | 1.700 | 14.0 | 7.1 | 1848 | 1728 | 1848 | 1704 |
| 16834 | 1.650 | 13.6 | 6.8 | 1824 | 1776 | 1872 | 1776 |
| 16836 | 1.750 | 14.3 | 7.2 | 1920 | 1752 | 1920 | 1896 |
| 16837 | 1.650 | 13.7 | 6.9 | 1656 | 1704 | 1656 | 1752 |
| 16839 | 1.800 | 14.1 | 4.4 | 1848 | 1752 | 1920 | 1728 |
| 16840 | 1.900 | 14.5 | 7.1 | 1920 | 1896 | 1896 | 1848 |
| 16842 | 1.800 | 14.4 | 7.0 | 1848 | 1776 | 1896 | 1728 |
| 16843 | 1.600 | 13.6 | 7.0 | 1776 | 1752 | 1704 | 1728 |
| 16844 | 1.700 | 14.5 | 7.0 | 1992 | 1896 | 1896 | 1824 |
| **MEAN** | **1.746** | **14.1** | **6.9** | **1883** | **1841** | **1872** | **1824** |
| **SD** | **0.078** | **0.3** | **0.7** | **103.3** | **114.5** | **95.2** | **98.0** |

**No values are significantly different from those of the control group (Group I).**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**

**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum #1 (μ) | Lft. Corpus Callosum #1 (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16731 | 2832 | 3024 | 182 | 173 | 1320 | 1344 | 768 |
| 16732 | 3216 | 3216 | 221 | 240 | 1272 | 1272 | 792 |
| 16734 | 3360 | 3360 | 250 | 278 | 1608 | 1656 | 912 |
| 16735 | 2928 | 3024 | 182 | 173 | 1368 | 1368 | 768 |
| 16736 | 2976 | 2928 | 221 | 230 | 1416 | 1416 | 816 |
| 16737 | 3072 | 3072 | 230 | 211 | 1440 | 1248 | 840 |
| 16738 | 3024 | 2880 | 278 | 250 | 1416 | 1440 | 816 |
| 16740 | 2880 | 2928 | 221 | 221 | 1224 | - | 696 |
| 16741 | 2928 | 2976 | 221 | 211 | 1488 | 1536 | 840 |
| 16742 | 3024 | 2688 | 298 | 336 | 1392 | 1344 | 816 |
| 16745 | 2976 | 2928 | 192 | 202 | 1440 | 1416 | 816 |
| 16746 | 2880 | 2880 | 182 | 182 | 1296 | 1296 | 720 |
| 16747 | 2928 | 3072 | 202 | 230 | 1512 | 1416 | 816 |
| 16749 | 3024 | 3024 | 182 | 163 | 1488 | 1416 | 840 |
| 16750 | 2928 | 2880 | 269 | 250 | 1368 | 1368 | 792 |
| 16753 | 2880 | 2880 | 163 | 173 | 1392 | 1440 | 792 |
| **MEAN** | **2991** | **2985** | **218** | **220** | **1403** | **1398** | **803** |
| **SD** | **135.4** | **154.0** | **39.0** | **45.5** | **97.2** | **102.4** | **50.3** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Right Striatum (μ) | Left Striatum (μ) | Rt. Corpus Callosum (μ) | Lft. Corpus Callosum (μ) | Right Hippocamp. (μ) | Left Hippocamp. (μ) | Right Dentate (μ) |
|---|---|---|---|---|---|---|---|
| 16823 | 3168 | 3072 | 202 | 202 | 1488 | 1584 | 888 |
| 16825 | 3120 | 3072 | 278 | 240 | 1344 | 1392 | 792 |
| 16826 | 3120 | 3024 | ---- | ---- | 1440 | 1440 | 816 |
| 16827 | 2880 | 2880 | 317 | 307 | 1488 | 1440 | 864 |
| 16828 | 3024 | 2928 | 211 | 221 | 1392 | 1368 | 792 |
| 16830 | 2928 | 2928 | 221 | 230 | 1512 | 1488 | 888 |
| 16831 | 3216 | 3120 | ---- | ---- | 1416 | 1344 | 792 |
| 16833 | 3168 | 2976 | ---- | ---- | 1296 | 1248 | 744 |
| 16834 | 3168 | 2976 | 221 | 317 | 1392 | ---- | 816 |
| 16836 | 3120 | 3072 | 336 | 346 | 1440 | 1368 | 816 |
| 16837 | 3072 | 3024 | 298 | 307 | 1440 | 1416 | 816 |
| 16839 | 3120 | 3072 | 259 | 269 | 1536 | 1608 | 888 |
| 16840 | 3216 | 3072 | 221 | 288 | 1464 | 1416 | 816 |
| 16842 | 2928 | 2880 | 192 | 202 | 1296 | 1200 | 768 |
| 16843 | 3120 | 2928 | 221 | 230 | 1320 | 1320 | 768 |
| 16844 | 3216 | 3120 | 173 | 173 | 1368 | 1368 | 792 |
| **MEAN** | **3099** | **3009** | **242** | **256** | **1415** | **1400** | **816** |
| **SD** | **106.6** | **81.7** | **50.7** | **53.1** | **75.1** | **108.3** | **44.7** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 2**

**Brain Weights and Morphometry Data for F1 Generation Day 22 Postpartum Female Rats**
**Maternal Dosage Group I (0 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16731 | 768 | 600 | 624 | 456 | 456 | 4656 | 163 | 163 |
| 16732 | 720 | 576 | 552 | 456 | 480 | 4896 | 211 | 221 |
| 16734 | 936 | 696 | 672 | 456 | 480 | 4800 | 144 | 144 |
| 16735 | 744 | 648 | 600 | 480 | 504 | 4464 | 202 | 202 |
| 16736 | 840 | 576 | 576 | 408 | 408 | 4320 | 202 | 202 |
| 16737 | 720 | 624 | 648 | 480 | 552 | 4752 | 230 | 221 |
| 16738 | 816 | 576 | 648 | 504 | 528 | 4896 | 211 | 211 |
| 16740 | 672 | 528 | ---- | 384 | 360 | 4704 | 154 | 144 |
| 16741 | 912 | 600 | 648 | 456 | 504 | 4752 | 221 | 230 |
| 16742 | 792 | 576 | 600 | 480 | 480 | 4128 | 202 | 192 |
| 16745 | 792 | 600 | 648 | 456 | 480 | 4656 | 182 | 182 |
| 16746 | 720 | 576 | 576 | 408 | 384 | 4560 | 154 | 154 |
| 16747 | 792 | 696 | 672 | 576 | 600 | 5088 | 202 | 202 |
| 16749 | 768 | 576 | 600 | 504 | 600 | 4608 | 192 | 173 |
| 16750 | 768 | 552 | 552 | 480 | 480 | 5136 | 221 | 230 |
| 16753 | 744 | 552 | 576 | 432 | 432 | 4656 | 192 | 211 |
| **MEAN** | **782** | **597** | **613** | **464** | **483** | **4692** | **193** | **193** |
| **SD** | **69.5** | **47.9** | **41.4** | **45.3** | **67.8** | **257.3** | **26.3** | **29.4** |

**Maternal Dosage Group V (30 mg/kg/day)**

| Rat Number | Left Dentate (μ) | Right CA1 (μ) | Left CA1 (μ) | Right CA3 (μ) | Left CA3 (μ) | Cerebellum (μ) | Corpus Callosa #2 (μ) Right | Left |
|---|---|---|---|---|---|---|---|---|
| 16823 | 912 | 576 | 624 | 432 | 432 | 4560 | 259 | 250 |
| 16825 | 816 | 624 | 600 | 504 | 480 | 4944 | 192 | 221 |
| 16826 | 816 | 600 | 600 | 480 | 456 | 4560 | 211 | 192 |
| 16827 | 840 | 576 | 600 | 480 | 504 | 4704 | 221 | 221 |
| 16828 | 792 | 600 | 576 | 432 | 456 | 4656 | 202 | 202 |
| 16830 | 840 | 624 | 672 | 456 | 480 | 4944 | 182 | 202 |
| 16831 | 792 | 624 | 600 | 480 | 528 | 4992 | 192 | 192 |
| 16833 | 744 | 552 | 576 | 432 | 504 | 4464 | 173 | 182 |
| 16834 | ---- | 600 | ---- | 456 | ---- | 4992 | 192 | 202 |
| 16836 | 792 | 600 | 600 | 480 | 504 | 4608 | 221 | 211 |
| 16837 | 792 | 600 | 600 | 480 | 648 | 4608 | 211 | 211 |
| 16839 | 936 | 648 | 648 | 528 | 528 | 4704 | 221 | 230 |
| 16840 | 816 | 600 | 552 | 480 | 528 | 5088 | 269 | 259 |
| 16842 | 720 | 576 | 480 | 432 | 528 | 4704 | 202 | 211 |
| 16843 | 768 | 504 | 600 | 384 | 432 | 4656 | 182 | 192 |
| 16844 | 792 | 528 | 552 | 432 | 456 | 4752 | 202 | 202 |
| **MEAN** | **811** | **590** | **592** | **461** | **498** | **4746** | **208** | **211** |
| **SD** | **56.1** | **37.1** | **44.1** | **35.3** | **54.0** | **187.0** | **26.2** | **21.0** |

**No values are significantly different from those of the control group (Group I).**
**The absence of a measurement indicates sub-optimal representation of the area in the sections.**

**TABLE 3**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Male Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Olfactory Bulb | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Piriform Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Frontal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cingulate Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Septal Nuclei | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Anterior Commissure | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Parietal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Caudate Nucleus/Putamen | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Globus Pallidus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Optic Nerve/Chiasm | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day, 4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 3**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Male Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Corpus Callosum | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| External Capsule | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Internal Capsule | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Amygdala | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Retrosplenial Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Subiculum | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA1 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA2 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA3 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Polymorphous Layer, Hipp | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 3

### Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Male Rats

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Dentate Gyrus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Thalamus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hypothalamus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Temporal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Occipital Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Midbrain | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Entorhinal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Substantia Nigra, Retic | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cerebral Peduncle | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cerebellar Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 3**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Male Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Cerebellar White Matter | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Pons | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Vestibular Nucleus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Medulla Oblongata | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Pyramids | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Trigeminal Tract | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 4

### Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Female Rats

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Olfactory Bulb | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Piriform Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Frontal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cingulate Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Septal Nuclei | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Anterior Commissure | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Parietal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Caudate Nucleus/Putamen | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Globus Pallidus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Optic Nerve/Chiasm | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 4**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Female Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Corpus Callosum | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| External Capsule | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Internal Capsule | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Amygdala | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Retrosplenial Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Subiculum | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA1 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA2 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hippocampus, CA3 | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Polymorphous Layer, Hipp | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 4**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Female Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Dentate Gyrus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Thalamus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Hypothalamus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Temporal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Occipital Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Midbrain | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Entorhinal Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Substantia Nigra, Retic | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cerebral Peduncle | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Cerebellar Cortex | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

**TABLE 4**

**Neuropathology Summary Data for $F_1$ Generation Day 22 Postpartum Female Rats**

| GROUP: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Number of animals included | 16 | 0 | 0 | 0 | 16 |
| Cerebellar White Matter | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Pons | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Vestibular Nucleus | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Medulla Oblongata | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Pyramids | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |
| Trigeminal Tract | | | | | |
| Number of Tissues Examined | 16 | 0 | 0 | 0 | 16 |
| Microscopically Normal | 16 | - | - | - | 16 |

Group Legend: 1 is 0 mg/kg/day, 2 is 0.01 mg/kg/day, 3 is 0.1 mg/kg/day,
4 is 1.0 mg/kg/day, 5 is 30.0 mg/kg/day
Statistics performed using Fisher's exact (1-tail)
None significantly different from GROUP 1

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16731M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16732M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16734M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16735M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16736M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16737M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16738M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16740M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 0 mg/kg/day

ANIMAL ID: 16741M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16742M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16745M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16746M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16747M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16749M DATE OF DEATH:23-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16750M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16753M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16823M DATE OF DEATH:24-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16825M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16826M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16827M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 30.0 mg/kg/day

ANIMAL ID: 16828M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16830M DATE OF DEATH:23-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 30.0 mg/kg/day

ANIMAL ID: 16831M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16833M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

ANIMAL ID: 16834M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16836M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 30.0 mg/kg/day

ANIMAL ID: 16837M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16839M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 5**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats**

Group: 30.0 mg/kg/day

ANIMAL ID: 16840M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16842M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 5

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Male Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16843M DATE OF DEATH:26-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16844M DATE OF DEATH:25-FEB-99 MALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16731F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16732F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16734F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16735F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 6**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16736F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16737F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16738F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16740F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16741F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16742F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 6**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16745F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16746F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 0 mg/kg/day

ANIMAL ID: 16747F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16749F DATE OF DEATH:23-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 6**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats**

Group: 0 mg/kg/day

ANIMAL ID: 16750F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16753F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16823F DATE OF DEATH:24-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16825F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16826F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16827F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16828F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16830F DATE OF DEATH:23-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16831F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16833F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**TABLE 6**

**Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats**

Group: 30.0 mg/kg/day

ANIMAL ID: 16834F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16836F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16837F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16839F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16840F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16842F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

## TABLE 6

### Individual Neuropathology Data for $F_1$ Generation Day 22 Postpartum Female Rats

Group: 30.0 mg/kg/day

ANIMAL ID: 16843F DATE OF DEATH:26-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

ANIMAL ID: 16844F DATE OF DEATH:25-FEB-99 FEMALE SCHEDULED SACRIFICE

| TISSUE/ANATOMIC SITE | DIAGNOSES | GROSS/MICRO CORRELATE |
|---|---|---|
| The following tissues/anatomic sites are microscopically normal: | | |
| Olfactory Bulb | Piriform Cortex | Frontal Cortex |
| Cingulate Cortex | Septal Nuclei | Anterior Commissure |
| Parietal Cortex | Caudate Nucleus/Putamen | Globus Pallidus |
| Optic Nerve/Chiasm | Corpus Callosum | External Capsule |
| Internal Capsule | Amygdala | Retrosplenial Cortex |
| Subiculum | Hippocampus, CA1 | Hippocampus, CA2 |
| Hippocampus, CA3 | Polymorphous Layer, Hipp | Dentate Gyrus |
| Thalamus | Hypothalamus | Temporal Cortex |
| Occipital Cortex | Midbrain | Entorhinal Cortex |
| Substantia Nigra, Retic | Cerebral Peduncle | Cerebellar Cortex |
| Cerebellar White Matter | Pons | Vestibular Nucleus |
| Medulla Oblongata | Pyramids | Trigeminal Tract |

**Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or *via* Maternal Milk**

**Neuropathology Report on $F_1$ Generation Day 22 Postpartum Rats**

## QUALITY ASSURANCE STATEMENT

Consultant Pathologist: Robert H. Garman, DVM

The following internal inspections were conducted to assure procedural quality and accuracy of data handling and reporting of results:

| Inspection | Dates Performed |
|---|---|
| Quality of Micro slide preparations: | 5/29/00 |

In addition, the following inspections were conducted by an independent Quality Assurance Monitor, and the results of these inspections were reported to the Pathologist and to the Study Director:

| Inspections Performed | Dates Performed and Reported to Pathologist | Date Reported To Study Director |
|---|---|---|
| 1. Records of the above internal inspections: | 12/30/00 | 1/11/01 |
| 2. Raw data, final report: | 12/30/00; 1/4/01; 1/6/01 | 1/11/01 |
| 3. Revised final report: | 1/21/01, 2/3/01, 2/24/01, 3/03/01, 3/10/01, & 3/13/01 | 1/22/01, 2/5/01, 2/26/01, 3/06/01, 3/12/01, & 3/14/01 |

Denise L. Fait 3/13/01

Denise L. Fait, B.S. Date
Quality Assurance Consultant

# APPENDIX M

# QUALITY ASSURANCE UNIT FINAL REPORT STATEMENT

PRIMEDICA

Argus Research Laboratories, Inc.
905 Sheehy Drive, Building A
Horsham, PA 19044
Telephone: (215) 443-8710
Telefax: (215) 443-8587

# QUALITY ASSURANCE UNIT FINAL REPORT STATEMENT

Study Director: Raymond G. York, Ph.D., DABT

Executive Director of Research: Mildred S. Christian, Ph.D., Fellow, ATS

Protocol 1416-003: Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or via Maternal Milk

The draft protocol for this study was audited for adherence to U.S. Environmental Protection Agency (EPA TSCA) Good Laboratory Practice Standards on 27 DEC 99 to 28 DEC 99.

Critical phases of this study were inspected eight times; study information and raw data were audited four times (see tables 1 and 2 for dates and phases/data).

The draft final report and the raw data for this study were compared and audited for accuracy, for adherence to protocol requirements, and for adherence to U.S. Environmental Protection Agency (EPA TSCA) Good Laboratory Practice Standards between 18 APR 00 and 05 JUN 00, and for revisions requested on 20 FEB 01 and finalization on 14 MAR 01.

This study was conducted according to U.S. Environmental Protection Agency (EPA TSCA) Good Laboratory Practice Standards.

Nancy J. Gongliewski 14 Mar 01 — Nancy J. Gongliewski 14 Mar 01

Nancy J. Gongliewski Date
Manager of Regulatory Compliance

for Lisa A. Zaborowski, B.S. Date
Senior Quality Assurance Associate
and Principal Auditor

TABLE 1

CRITICAL PHASES INSPECTED

Caesarean-Sectioning

Date of inspection: 01 FEB 00

Date results reported to the Study Director and Management: 11 FEB 00

Test Substance Preparation

Date of inspection: 02 FEB 00

Date results reported to the Study Director and Management: 11 FEB 00

Natural Delivery/Litter Observations

Date of inspection: 09 FEB 00

Date results reported to the Study Director and Management: 11 FEB 00

Blood Collection

Date of inspection: 11 FEB 00

Date results reported to the Study Director and Management: 11 FEB 00

Culling/Pup Sacrifice: Day 5

Date of inspection: 12 FEB 00

Date results reported to the Study Director and Management: 15 FEB 00

Blood Collection (Pups)

Date of inspection: 15 FEB 00

Date results reported to the Study Director and Management: 15 FEB 00

Necropsy - Dam/Litter Sacrifice - Day 22

Date of inspection: 25 FEB 00

Date results reported to the Study Director and Management: 25 FEB 00

Test Substance Administration - Oral (Drinking Water)

Date of Inspection: 25 FEB 00

Date results reported to the Study Director and Management: 03 MAR 00

TABLE 2

RAW DATA AUDIT(S)

The following study information and raw data were audited from 19 APR 00 to 03 MAY 00:

Protocol.
Protocol amendments.
List of personnel and computer operator codes.
Error codes and codes for clinical sign observations.
Animal receipt, randomization, physical examination and acclimation.
In-life transaction record.
Feed consumption.
Water consumption.
Cohabitation.
Natural delivery observations.
Litter observations.
Pup body weights and status.
Pup Randomization.
Necropsy.
Organ weights.
Tissue packing lists.
Edit requests.
Deviations.
Blood collection data and packing lists.

The results of this audit were reported to the Study Director and Management on 05 MAY 00.

The following study information and raw data were audited from 06 MAR 00 to 10 MAR 00:

Protocol.
Protocol amendments.
List of personnel and computer operator codes.
Error codes and codes for clinical sign observations.
Animal receipt, randomization, physical examination and acclimation.
In-life transaction record.
Feed consumption.
Water consumption.
Caesarean-sectioning.
Maternal gross observations.
Fetal fixative assignment.
Necropsy.
Organ weights.
Tissue packing lists.
Edit requests.
Deviations.
Blood collection data and packing lists.

The results of this audit were reported to the Study Director and Management on 10 MAR 00.

The following study information and raw data were audited from 05 MAY 00 to 12 MAY 00:

Protocol.
Protocol amendments.
List of personnel and computer operator codes.
Error codes and codes for clinical sign observations.
Animal receipt, randomization, physical examination and acclimation.
In-life transaction record.
Feed consumption.
Water consumption.
Cohabitation.
Natural delivery observations.
Litter observations.
Pup body weights and status.
Pup Randomization.
Necropsy.
Tissue packing lists.
Edit requests.
Deviations.
Blood collection data and packing lists.

The results of this audit were reported to the Study Director and Management on 14 MAY 00

The following study information and raw data were audited on 21 MAY 00 to 30 MAY 00:

Test substance receipt, preparation and use.
Test substance packing lists.

The results of this audit were reported to the Study Director and Management on 30 MAY 00.