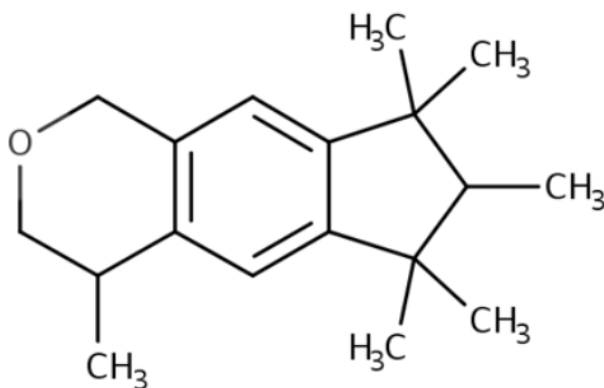

**Draft Data Extraction Information for
Environmental Hazard and Human Health Hazard Animal Toxicology and
Epidemiology for
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[γ]-2-benzopyran (HHCB)**

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 1222-05-5



March 2026

This supplemental file contains information regarding the data extraction results relevant to the *raft Human Health and Environmental Hazard Assessment for 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [γ]-2-benzopyran (HHCB)*. EPA used the TSCA systematic review process described in the *Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances* (also referred to as the '2021 Draft Systematic Review Protocol'). Any updated steps in the systematic review process for data extraction since the publication of the 2021 Draft Systematic Review Protocol are described in the *Draft Systematic Review Protocol for 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [γ]-2-benzopyran (HHCB)*. EPA conducted data extraction based on author-reported descriptions and results; additional analyses (e.g., statistical analyses performed during data integration into the risk evaluation) potentially conducted by EPA are not contained in this supplemental file.

Environmental Hazard Data Extraction: As explained in Section 6.4 of the 2021 Draft Systematic Review Protocol, key study details (e.g., exposure duration vs. study duration) were extracted from references that underwent data quality evaluation; these study details are available in the tables below. The study details and respective endpoints were organized by first the chemical (target chemical followed by analog chemical), then relevant habitat (i.e., aquatic vs. terrestrial), followed by taxa categories (e.g., vertebrates, invertebrates, vegetation), taxonomic groups (e.g., fish, amphibian, mammalian, avian, worms, vascular plants), individual species, and finally exposure duration.

All the references that underwent data quality evaluation using the environmental hazard data quality metrics were extracted regardless of metric ranking and are included in this supplemental file. In the environmental hazard data extraction table, for some studies there were hazard health outcomes with multiple health effect levels extracted from ECOTOX; if all the data for one same health outcome were the same except for the health effect level (e.g., LOEL level), multiple data extraction rows were combined into a single row in the table. All the extracted environmental hazard data will also be available in the [ECOTOXicology Knowledgebase \(ECOTOX\) database](#); moreover, additional data sources and experimental details for these studies will also be available in ECOTOX.

Data Extraction of Rodent Data for the Application of Environmental Hazard: For HHCB, toxicity data gaps were identified for mammalian wildlife relevant to the terrestrial compartment of the environmental hazard assessment. This table includes rodent data for HHCB, which were used as proxy for mammalian wildlife. The rodent data were evaluated following the human health hazard animal toxicity evaluation and extraction process; however, additional data for health outcomes most relevant for environmental hazard assessment were also extracted and are listed here.

Human Health Hazard Animal Toxicity Extraction: This supplemental file contains data extraction information for references that met the PECO screening criteria described in the *Draft Systematic Review Protocol for 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [γ]-2-benzopyran (HHCB)*. The data extraction included study Guideline compliance, animal characteristics (species, strain, sex), experimental details (exposure route/duration), study-wide POD for specified health outcomes (dose/concentration), list of target organs/systems, a detailed study summary, major study limitations, and the OQD rating from study evaluations.

Epidemiological Study Information Extraction: All epidemiology references that met PECO screening inclusion criteria and further filtering criteria and had an overall quality determination of High, Medium, or Low were extracted as detailed in Section 6.4 of the 2021 Draft Systematic Review Protocol and the *Draft Systematic Review Protocol for 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [γ]-2-benzopyran (HHCB)*. The data extracted include the measured health effect or endpoint, a description of the study population, the specific exposure compound measured and summary levels of exposure, the method of exposure measurement, and a summary of the results. Each health outcome assessed in a reference is extracted separately, and as such, each reference may have more than one record in the data extraction tables, with each record categorized by health outcome.

HERO ID	Reference	Page
Environmental Hazard		10
HHCB		
Habitat: Aquatic Taxa: Mollusks		
	<i>Bellamya sp.</i> (Snail)	
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	10
	<i>Corbicula fluminea</i> (Asian Clam)	
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	10
	<i>Lampsilis cardium</i> (Plain Pocketbook)	
625761	Gooding, M.P., Newton, T.J., Bartsch, M.R., Hornbuckle, K.C. (2006). Toxicity of synthetic musks to early life stages of the freshwater mussel <i>Lampsilis cardium</i> . <i>Archives of Environmental Contamination and Toxicology</i> 51(4):549-558.	10
	<i>Potamopyrgus antipodarum</i> (Snail)	
5428156	Pedersen, S., Selck, H., Salvito, D., Forbes, V. (2009). Effects of the polycyclic musk HHCB on individual- and population-level endpoints in <i>Potamopyrgus antipodarum</i> . <i>Ecotoxicology and Environmental Safety</i> 72(4):1190-1199.	14
Habitat: Aquatic Taxa: Arthropods		
	<i>Acartia tonsa</i> (Calanoid Copepod)	
8550022	DHI, (2007). <i>Acartia tonsa</i> larval development test with “HHCB”.	20
1942534	Wollenberger, L., Breitholtz, M., Kusk, K.O., Bengtsson, B.E. (2003). Inhibition of larval development of the marine copepod <i>Acartia tonsa</i> by four synthetic musk substances. <i>Science of the Total Environment</i> 305(1-3):53-64.	25
	<i>Chironomus plumosus</i> (Midge)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	26
	<i>Chironomus riparius</i> (Midge)	
5352378	Artola-Garicano, E., Sinnige, T.L., Holsteijn, I.V., Vaes, W.H., Hermens, J.L. (2003). Bioconcentration and acute toxicity of polycyclic musks in two benthic organisms (<i>Chironomus riparius</i> and <i>Lumbriculus variegatus</i>). <i>Environmental Toxicology and Chemistry</i> 22(5):1086-1092.	27
8784980	IFF, (2004). HHCB/galaxolide: A study on the toxicity to the sediment dweller <i>chironomus riparius</i> (sanitized).	33
	<i>Chironomus yoshimatsui</i> (Midge)	
5427931	Tamura, I., Kimura, K., Kameda, Y., Nakada, N., Yamamoto, H. (2013). Ecological risk assessment of urban creek sediments contaminated by untreated domestic wastewater: potential contribution of antimicrobials and a musk fragrance. <i>Environmental Technology</i> 34(12):1567-1575.	36
	<i>Daphnia magna</i> (Water Flea)	

Table of Contents

4690050	Chen, F., Yao, Q., Zhou, X. (2015). The influence of suspended solids on the combined toxicity of galaxolide and lead to <i>Daphnia magna</i> . <i>Bulletin of Environmental Contamination and Toxicology</i> 95(1):73-79.	36
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	37
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	37
7607958	Wüthrich, V. (1996). Influence of HHCB on the reproduction of <i>Daphnia magna</i> .	37
	<i>Hyalella azteca</i> (Scud)	
8784982	IFF, (2004). HHCB/galaxolide: A study on the toxicity to the sediment dweller <i>hyalella azteca</i> (sanitized).	38
	<i>Macrobrachium nipponense</i> (Oriental River Shrimp)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	43
	<i>Nitocra spinipes</i> (Harpacticoid Copepod)	
1417909	Breitholtz, M., Wollenberger, L., Dinan, L. (2003). Effects of four synthetic musks on the life cycle of the harpacticoid copepod <i>Nitocra spinipes</i> . <i>Aquatic Toxicology</i> 63(2):103-118.	43
	<i>Orthocladinae</i> (Midge Subfamily)	
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	45
	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp)	
5400911	Ehiguese, F.O., Fernandez, M.C., Lara-Martin, P.A., Martin-Diaz, M.L., Araujo, C.V. (2019). Avoidance behaviour of the shrimp <i>Palaemon varians</i> regarding a contaminant gradient of galaxolide and tonalide in seawater. <i>Chemosphere</i> 232:113-129.	45
	Habitat: Aquatic Taxa: Amphibian	
	<i>Pelophylax nigromaculatus</i> (Black-Spotted Frog)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	48
	<i>Xenopus laevis</i> (African Clawed Frog)	
3007206	Pablos, M.V., Jiménez, M.Á., Segundo, L.S., Martini, F., Beltrán, E., Fernández, C. (2015). Effects of dietary exposure of polycyclic musk HHCB on the metamorphosis of <i>Xenopus laevis</i> . <i>Environmental Toxicology and Chemistry</i> 35(6):1428-1435.	48
	Habitat: Aquatic Taxa: Fish	
	<i>Carassius auratus</i> (Goldfish)	
4648141	Chen, F., Gao, J., Zhou, Q. (2012). Toxicity assessment of simulated urban runoff containing polycyclic musks and cadmium in <i>Carassius auratus</i> using oxidative stress biomarkers. <i>Environmental Pollution</i> 162:91-97.	55
	<i>Danio rerio</i> (Zebra Danio)	
5185657	Carlsson, G., Norrgren, L. (2004). Synthetic musk toxicity to early life stages of zebrafish (<i>Danio rerio</i>). <i>Archives of Environmental Contamination and Toxicology</i> 46(1):102-105.	58
11791368	Chae, H., Kwon, B. R., Lee, S., Moon, H. B., Choi, K. (2023). Adverse thyroid hormone and behavioral alterations induced by three frequently used synthetic musk compounds in embryo-larval zebrafish (<i>Danio rerio</i>). <i>Chemosphere</i> 324:138273.	60

Table of Contents

3405953	Zhang, L., An, J., Zhou, Q. (2012). Single and joint effects of HHCB and cadmium on zebrafish (<i>Danio rerio</i>) in feculent water containing bedloads. <i>Frontiers of Environmental Science & Engineering</i> 6(3):360-372.	72
	<i>Gobiocypris rarus</i> (Chinese Rare Minnow)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	78
	<i>Lepomis macrochirus</i> (Bluegill)	
5352386	Dijk, Van, A. (1996). Accumulation and elimination of 14C-HHCB by Bluegill Sunfish in a dynamic flow-through system.	78
7607948	Schneider, S. Z., Zhang, L., Martin, K. H., Aufderheide, J. A. (2021). HHCB: A dietary exposure bioaccumulation test with the bluegill sunfish (<i>Lepomis macrochirus</i>). Final report.	80
7607846	Wüthrich, V. (1996). HHCB: 21-Day prolonged toxicity study in the bluegill sunfish under flow-through conditions.	81
	<i>Misgurnus anguillicaudatus</i> (Oriental Weatherfish)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	84
	<i>Oryzias latipes</i> (Japanese Medaka)	
5352387	Yamauchi, R., Ishibashi, H., Hirano, M., Mori, T., Kim, J.W., Arizono, K. (2008). Effects of synthetic polycyclic musks on estrogen receptor, vitellogenin, pregnane X receptor, and cytochrome P450 3A gene expression in the livers of male medaka (<i>Oryzias latipes</i>). <i>Aquatic Toxicology</i> 90(4):261-268.	85
	<i>Oryzias sinensis</i> (Chinese Medaka)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	87
	<i>Pimephales promelas</i> (Fathead Minnow)	
7607847	Croudace, C. P., Caunter, J. E., Johnson, P. A. (1997). HHCB: Chronic toxicity to fathead minnow (<i>Pimephales promelas</i>) embryos and larvae.	87
Habitat: Aquatic Taxa: Worms		
	<i>Branchiura sowerbyi</i> (Oligochaete)	
5428154	Peng, F.J., Hu, L.X., Pan, C.G., Ying, G.G., Brink, P.J. (2019). Insights into the sediment toxicity of personal care products to freshwater oligochaete worms using Fourier transform infrared spectroscopy. <i>Ecotoxicology and Environmental Safety</i> 172:296-302.	91
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	92
	<i>Capitella capitata</i> (Polychaete Worm)	
5428042	Ramkov, T., Selck, H., Salvito, D., Forbes, V.E. (2009). INDIVIDUAL- AND POPULATION-LEVEL EFFECTS OF THE SYNTHETIC MUSK, HHCB, ON THE DEPOSIT-FEEDING POLYCHAETE, CAPITELLA SP I. <i>Environmental Toxicology and Chemistry</i> 28(12):2695-2705.	92
	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete)	
5428397	Fan, B., Wang, X., Li, J., Gao, X., Li, W., Huang, Y., Liu, Z. (2019). Deriving aquatic life criteria for galaxolide (HHCB) and ecological risk assessment. <i>Science of the Total Environment</i> 681:488-496.	106
5428154	Peng, F.J., Hu, L.X., Pan, C.G., Ying, G.G., Brink, P.J. (2019). Insights into the sediment toxicity of personal care products to freshwater oligochaete worms using Fourier transform infrared spectroscopy. <i>Ecotoxicology and Environmental Safety</i> 172:296-302.	107
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	108
	<i>Lumbriculus variegatus</i> (Oligochaete, Worm)	

Table of Contents

5352378	Artola-Garicano, E., Sinnige, T.L., Holsteijn, I.V., Vaes, W.H., Hermens, J.L. (2003). Bioconcentration and acute toxicity of polycyclic musks in two benthic organisms (<i>Chironomus riparius</i> and <i>Lumbriculus variegatus</i>). <i>Environmental Toxicology and Chemistry</i> 22(5):1086-1092.	109
8784981	IFF, (nan). HHCB/galaxolide: A study on the toxicity to the aquatic oligochaete <i>lumbriculus variegatus</i> (sanitized).	111
Habitat: Aquatic Taxa: Non-vascular plants		
<i>Chlorophyta</i> (Green Algae Division)		
5428151	Peng, F.J., Kiggen, F., Pan, C.G., Bracewell, S.A., Ying, G.G., Salvito, D., Selck, H., Brink, P.J. (2019). Fate and effects of sediment-associated polycyclic musk HHCB in subtropical freshwater microcosms. <i>Ecotoxicology and Environmental Safety</i> 169:902-910.	117
<i>Raphidocelis subcapitata</i> (Green Algae)		
7607844	Dijk, Van, A. (nan). Acute toxicity of HHCB to <i>pseudokirchneriella subcapitata</i> .	117
Habitat: Terrestrial Taxa: Vascular plants		
<i>Allium cepa</i> (Common Onion)		
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	122
<i>Allium tuberosum</i> (Chinese Chives)		
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	125
<i>Avena sativa</i> (Common Oat)		
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	127
<i>Bougainvillea spectabilis</i> (Bougainvillea)		
5120365	Zhang, M., Liu, J., Wang, W., Bao, Y. (2019). Responses of <i>Bougainvillea spectabilis</i> to elevated atmospheric CO ₂ under galaxolide (HHCB) pollution and the mechanisms of its rhizosphere metabolism. <i>Journal of Soils and Sediments</i> 19(1):159-170.	128
<i>Brassica napus</i> (Rapeseed)		
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	132
<i>Brassica rapa var. amplexicaulis</i> (Celery Cabbage)		
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	134
<i>Cucumis sativus</i> (Cucumber)		
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	137
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	139
<i>Glycine max</i> (Soybean)		
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	141
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	145
<i>Gypsophila elegans</i> (Showy Babysbreath)		

Table of Contents

1294252	Sinkkonen, A., Myyrä, M., Penttinen, O.P., Rantalainen, A.L. (2011). Selective toxicity at low doses: experiments with three plant species and toxicants. Dose-Response 9(1):130-143.	147
	<i>Lactuca sativa</i> (Lettuce)	
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). Science of the Total Environment 508:122-127.	147
	<i>Portulaca oleracea</i> (Wild Portulaca)	
1294252	Sinkkonen, A., Myyrä, M., Penttinen, O.P., Rantalainen, A.L. (2011). Selective toxicity at low doses: experiments with three plant species and toxicants. Dose-Response 9(1):130-143.	150
	<i>Solanum lycopersicum</i> (Garden Tomato)	
8784978	IFF, (2019). HHCB: Effects on terrestrial (non-target) plants: Seedling emergence and seedling growth test (sanitized).	150
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). Science of the Total Environment 508:122-127.	153
	<i>Triticum aestivum</i> (Bread Wheat)	
5427815	An, J., Zhou, Q., Sun, Y., Xu, Z. (2009). Ecotoxicological effects of typical personal care products on seed germination and seedling development of wheat (<i>Triticum aestivum</i> L.). Chemosphere 76(10):1428-1434.	156
4690052	Chen, C., Cai, Z. (2015). Physiological and antioxidant responses in wheat (<i>Triticum aestivum</i>) to HHCB in soil. Bulletin of Environmental Contamination and Toxicology 95(2):272-277.	161
4650262	Chen, C., Zhou, Q., Bao, Y., Li, Y., Wang, P. (2010). Ecotoxicological effects of polycyclic musks and cadmium on seed germination and seedling growth of wheat (<i>Triticum aestivum</i>). Journal of Environmental Sciences 22(12):1966-1973.	170
3399556	Chen, C., Zhou, Q., Cai, Z. (2014). Effect of soil HHCB on cadmium accumulation and phytotoxicity in wheat seedlings. Ecotoxicology 23(10):1996-2004.	172
3187166	Wang, M., Peng, C., Chen, W., Markert, B. (2013). Ecological risks of polycyclic musk in soils irrigated with reclaimed municipal wastewater. Ecotoxicology and Environmental Safety 97:242-247.	175
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). Science of the Total Environment 508:122-127.	181
	<i>Zea mays</i> (Corn)	
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). Science of the Total Environment 508:122-127.	183
Habitat: Terrestrial Taxa: Worms		
	<i>Caenorhabditis elegans</i> (Nematode)	
5919179	Mori, T., Morita, F., Inokuchi, A., Takao, Y., Kohra, S., Tominaga, N., Takemasa, T., Arizono, K. (2006). Ecotoxicological Effect of Polycyclic Musks on <i>Caenorhabditis elegans</i> . Journal of Health Science 52(3):276.	186
	<i>Eisenia fetida</i> (Earthworm)	
5352379	Chen, C., Xue, S., Zhou, Q., Xie, X. (2011). Multilevel ecotoxicity assessment of polycyclic musk in the earthworm <i>Eisenia fetida</i> using traditional and molecular endpoints. Ecotoxicology 20(8):1949-1958.	188
4690063	Chen, C., Zhou, Q. (2012). Lipid Peroxidation and Gene Expression of Antioxidant Enzymes in Response to Polycyclic Musks in Earthworm <i>Eisenia Fetida</i> . Advanced Materials Research 365:245-+.	193
4690069	Chen, C., Zhou, Q., Liu, S., Xiu, Z. (2011). Acute toxicity, biochemical and gene expression responses of the earthworm <i>Eisenia fetida</i> exposed to polycyclic musks. Chemosphere 83(8):1147-1154.	196
7607848	Goßmann, A. (1997). Effects of HHCB on reproduction and growth of earthworms <i>Eisenia fetida</i> in artificial soil.	201

HHCB

Table of Contents

3406502	Liu, S., Zhou, Q., Chen, C. (2012). Antioxidant enzyme activities and lipid peroxidation in earthworm <i>Eisenia fetida</i> exposed to 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-cyclopenta-gamma-2-benzopyran. <i>Environmental Toxicology</i> 27(8):472-479.	203
5918304	Liu, S., Zhou, Q., Wang, Y. (2011). Ecotoxicological responses of the earthworm <i>Eisenia fetida</i> exposed to soil contaminated with HHCB. <i>Chemosphere</i> 83(8):1080-6. [Chemosphere].	208
5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	214

Habitat: Terrestrial Taxa: Mollusks

Achatina fulica (Giant African Snail)

5427885	Wang, X., Liu, Z., Wang, W., Zhang, C., Chen, L. (2015). Derivation of predicted no effect concentration (PNEC) for HHCB to terrestrial species (plants and invertebrates). <i>Science of the Total Environment</i> 508:122-127.	218
----------------	--	------------

Data Extraction of Rodent Data for the Application of Environmental Hazard 222

8785662	IFF (2020). A GLP simplified reproduction/developmental toxicity screening test of HHCB by the oral route (dietary admixture) in the rat (OECD 421) (sanitized).	222
4955361	M. S. Christian, R. M. Parker, A. M. Hoberman, R. M. Diener, A. M. Api (1999). Developmental toxicity studies of four fragrances in rats. <i>Toxicology Letters</i> 111(1-2):169-174.	222

Human Health Hazard Animal Toxicology 223

HHCB

Acute (less than or equal to 24 hr)

4955361	Christian, M.S., Parker, R.M., Hoberman, A.M., Diener, R.M., Api, A.M. (1999). Developmental toxicity studies of four fragrances in rats. <i>Toxicology Letters</i> 111(1-2):169-174.	223
8785033	IFF, (2016). Galaxolide undiluted. Evaluation of acute dermal toxicity in rats. (sanitized).	224
8785040	IFF, (1973). Galaxolide assay 1973 (sanitized).	224
8785084	IFF, (1975). Galaxolide 50 assay 1975.	225
8785111	IFF, (1973). Galaxolide 50 Assay 1973 (sanitized).	225
8785657	IFF, (1963). HHCB eye irritation studies. Acute eye irritation study in rabbits. Galaxolide (sanitized).	225

Short-term (>1-30 days)

5427830	Api, A.M., Ford, R.A. (1999). Evaluation of the oral subchronic toxicity of HHCB (1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran) in the rat. <i>Toxicology Letters</i> 111(1-2):143-149.	226
5431330	Argus Research Laboratories, (1997). Initial submission: audited draft report, oral (gavage) developmental toxicity study of (HHCB) in rats with attachments and cover letter dated 5/22/1997.	226
8785656	IFF, (1975). Galaxolide 50: Instilled into rabbit's eyes. HH06_HHCB (sanitized).	226
12338848	Li, M., Wang, P. (2023). Adverse effect of environmental androgenic compounds Galaxolide and Irgacure 369 on the male reproductive system. <i>Reproductive Toxicology</i> 122:108477.	227

Subchronic (>30-91 days)

HHCB

Table of Contents

5427830	Api, A.M., Ford, R.A. (1999). Evaluation of the oral subchronic toxicity of HHCB (1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran) in the rat. Toxicology Letters 111(1-2):143-149.	228
8785658	IFF, (nan). Twenty-six week subacute dermal toxicity study in rats. Book 1 of 4. Galaxolide 50. (sanitized).	228
Chronic (>91 days)		
8785658	IFF, (nan). Twenty-six week subacute dermal toxicity study in rats. Book 1 of 4. Galaxolide 50. (sanitized).	229
Reproductive/Developmental		
8785662	IFF, (2020). A GLP simplified reproduction/developmental toxicity screening test of HHCB by the oral route (dietary admixture) in the rat (OECD 421) (sanitized).	230
8785663	IFF, (nan). A prenatal developmental toxicity study of HHCB by the oral (gavage) route in the rabbit. (sanitized).	230
8785683	IFF, (2021). Extended one generation reproductive toxicity study (including cohorts 1 and F2 - generation of HHCB by the oral route (dietary admixture) in the rat (OECD 443) (sanitized).	231

Human Health Hazard Epidemiology	233
---	------------

HHCB

Irritation

2910944	An, S. S., Lee, A. Y., Lee, C. H., Kim, D. W., Hahm, J. H., Kim, K. J., Moon, K. C., Won, Y. H., Ro, Y. S., Eun, H. C. (2005). Fragrance contact dermatitis in Korea: a joint study. Contact Dermatitis 53(6):320-323.	233
5428193	Larsen, W., Nakayama, H., Fischer, T., Elsner, P., Frosch, P., Burrows, D., Jordan, W., Shaw, S., Wilkinson, J., Marks, J., Sugawara, M., Nethercott, M., Nethercott, J. (2001). Fragrance contact dermatitis: a worldwide multicenter investigation (Part II). Contact Dermatitis 44(6):344-346.	233

Neurological/Behavioral

5431388	Bell, I.R., Szarek, M.J., Dicenso, D.R., Baldwin, C.M., Schwartz, G.E., Bootzin, R.R. (1999). Patterns of waking EEG spectral power in chemically intolerant individuals during repeated chemical exposures. International Journal of Neuroscience 97(1-2):41-59.	234
----------------	---	------------

Sensitization

8785221	IFF, (1964). Repeated patch test. Galaxolide. (sanitized).	235
----------------	--	------------

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Bellamya sp.</i> (Snail), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (163.98 ug/L)	Mortality	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Corbicula fluminea</i> (Asian Clam), Not reported, Not Reported, Wild (SMALL UNCONTAMINATED HEADWATER STREAM, HUIZHOU, GUANGDONG PROVINCE, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (163.98 ug/L)	Mortality	High	5428151
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocketbook), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 138-264 ug/L / 333-642 ug/L / 632-1169 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>1750 ug/L)	Mortality	Medium	625761

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 179-325 ug/L / 417-762 ug/L / 810-1372 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (1427 (908-6404) ug/L)	Mortality	Medium	625761
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 179-325 ug/L / 417-762 ug/L / 810-1372 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (1000 (609-8615) ug/L)	Mortality	Medium	625761
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 179-325 ug/L / 417-762 ug/L / 810-1372 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (999 (805-1393) ug/L)	Mortality	Medium	625761
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 179-325 ug/L / 417-762 ug/L / 810-1372 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (1724 (1381-2452) ug/L)	Mortality	Medium	625761

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Glochidia, Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 138-264 ug/L / 333-642 ug/L / 632-1169 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>1750 ug/L)	Mortality	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 23-32 ug/L / 48-68 ug/L / 102-147 ug/L / 166-257 ug/L / 450-662 ug/L / 701-1031 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (32-1031 ug/L)	Mortality	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 23-32 ug/L / 48-68 ug/L / 102-147 ug/L / 166-257 ug/L / 450-662 ug/L / 701-1031 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (23-701 ug/L)	Mortality	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 23-32 ug/L / 48-68 ug/L / 102-147 ug/L / 166-257 ug/L / 450-662 ug/L / 701-1031 ug/L	Growth (Growth-Growth rate, Response Site: Not reported)	EC50 (831 (385-1277) ug/L)	Development/Growth	Medium	625761

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 23-32 ug/L / 48-68 ug/L / 102-147 ug/L / 166-257 ug/L / 450-662 ug/L / 701-1031 ug/L	Growth (Growth-Growth rate, Response Site: Not reported)	EC50 (563 (260-865) ug/L)	Development/Growth	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 22-30 ug/L / 38-56 ug/L / 85-123 ug/L / 185-291 ug/L / 365-536 ug/L / 829-1264 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (30-1264 ug/L)	Mortality	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 22-30 ug/L / 38-56 ug/L / 85-123 ug/L / 185-291 ug/L / 365-536 ug/L / 829-1264 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (22-829 ug/L)	Mortality	Medium	625761
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 22-30 ug/L / 38-56 ug/L / 85-123 ug/L / 185-291 ug/L / 365-536 ug/L / 829-1264 ug/L	Growth (Growth-Growth rate, Response Site: Not reported)	EC50 (153 (71-235) ug/L)	Development/Growth	Medium	625761

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lampsilis cardium</i> (Plain Pocket-book), Juvenile, 5 Day(s), Not Reported, Wild (F0 GENERATION WAS OBTAINED FROM THE BOONE RIVER, HAMILTON COUNTY, IA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 22-30 ug/L / 38-56 ug/L / 85-123 ug/L / 185-291 ug/L / 365-536 ug/L / 829-1264 ug/L	Growth (Growth-Growth rate, Response Site: Not reported)	EC50 (228 (106-351) ug/L)	Development/Growth	Medium	625761
1222-05-5	1 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DENMARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (100 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	2 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DENMARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (100 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (100 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	4 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (100 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	6 Week(s), (6 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Behavior (Feeding behavior-Food consumption, Response Site: Not reported)	LOEC (30 ug/g dry wt sediment)	Behavioral	High	5428156

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Week(s), (6 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Behavior (Feeding behavior-Food consumption, Response Site: Not reported)	NOEC (10 ug/g dry wt sediment)	Behavioral	High	5428156
1222-05-5	5-10 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (1 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	5-10 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEC (10 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	12 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (100 ug/g dry wt sediment)	Mortality	Medium	5428156
1222-05-5	12 Week(s), (12 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Adult, Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Adult	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Growth (Growth-Specific growth rate, Response Site: Whole organism)	NOEC (100 ug/g dry wt sediment)	Development/Growth	Medium	5428156
1222-05-5	12 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Growth (Growth-Specific growth rate, Response Site: Whole organism)	NOEC (10 ug/g dry wt sediment)	Development/Growth	High	5428156

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	12 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Growth (Growth-Specific growth rate, Response Site: Whole organism)	LOEC (30 ug/g dry wt sediment)	Development/Growth	High	5428156
1222-05-5	>40-<42 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Time to first progeny, Response Site: Not reported)	NOEC (30 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	>40-<42 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Growth (Growth-Size, Response Site: Whole organism)	NOEC (100 ug/g dry wt sediment)	Development/Growth	High	5428156

Continued on next page ...

...continued from previous page

Aquatic: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	>40-<42 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Reproduction (Reproduction-Time to first progeny, Response Site: Not reported)	LOEC (100 ug/g dry wt sediment)	Reproductive/Teratogenic	High	5428156
1222-05-5	43 Week(s), (43 Week(s))	<i>Potamopyrgus antipodarum</i> (Snail), Juvenile, >0 Hour(s), Not Reported, Wild (SALVAD PARK, ROSKILDE FJORD, DEN-MARK)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Juvenile	Unmeasured	0 ug/g dry wt sediment / 0.1 ug/g dry wt sediment / 1 ug/g dry wt sediment / 10 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (10 ug/g dry wt sediment)	Mortality	Medium	5428156

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg (Measured in: Larvae), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Larvae	Unmeasured	0 ug/L / 0 ug/L / 10 ug/L / 100 ug/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (10 ug/L)	Development/Growth	Uninformative	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	NOEC (36.8 (34.54-38.11) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple (Measured in: Larvae), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Larvae	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (293 (287.46-295.73) ug/L)	Development/Growth	Medium	8550022

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple (Measured in: Nauplii), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Nauplii	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (293 (287.46-295.73) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Population (Population-Index to population size; count, number, abundance, Response Site: Not reported)	LOEC (293 (287.46-295.73) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Mortality (Mortality-Hatch, Response Site: Not reported)	LOEC (293 (287.46-295.73) ug/L)	Mortality	Medium	8550022

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Unmeasured values (some measured values reported in article)	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	EC10 (43.8 (30.1-55.3) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Unmeasured values (some measured values reported in article)	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	EC90 (390 (290->600) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Unmeasured values (some measured values reported in article)	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	EC50 (131 (115-153) ug/L)	Development/Growth	Medium	8550022

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	LOEC (73.0 (69.43-77.07) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple (Measured in: Larvae), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Larvae	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (141 (137.27-144.50) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg (Measured in: Larvae), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Larvae	Unmeasured	0 ug/L / 0 ug/L / 10 ug/L / 100 ug/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (100 ug/L)	Development/Growth	Uninformative	8550022

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple (Measured in: Nauplii), Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, NA Nauplii	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (141 (137.27-144.50) ug/L)	Development/Growth	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Mortality (Mortality-Hatch, Response Site: Not reported)	NOEC (141 (137.27-144.50) ug/L)	Mortality	Medium	8550022
1222-05-5	6 Day(s), (6 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Multiple, Not Reported, Laboratory (ORIGINALLY COLLECTED FROM THE NORTH SEA AND CULTURED IN LABORATORY)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / <0-0.31 ug/L / 36.8 (34.54-38.11) ug/L / 73.0 (69.43-77.07) ug/L / 141 (137.27-144.50) ug/L / 293 (287.46-295.73) ug/L / 623 (590.15-658.49) ug/L	Population (Population-Index to population size; count, number, abundance, Response Site: Not reported)	NOEC (141 (137.27-144.50) ug/L)	Development/Growth	Medium	8550022

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Adult, Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Unmeasured	0 AI mg/L / 0.046-1.5 AI mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (0.47 (0.40-0.60) AI mg/L)	Mortality	High	1942534
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Adult, Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Unmeasured	0 AI mg/L / 0.046-1.5 AI mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC10 (0.12 (0.015-0.21) AI mg/L)	Mortality	High	1942534
1222-05-5	5 Day(s), (5 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg (Measured in: Larvae), Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Renewal, NA Larvae	Unmeasured	0 AI mg/L / 0.003 AI mg/L / 0.007 AI mg/L / 0.02 AI mg/L / 0.05 AI mg/L / 0.12 AI mg/L / 0.30 AI mg/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	EC10 (0.037 (0.024-0.056) AI mg/L)	Development/Growth	High	1942534

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	5 Day(s), (5 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg (Measured in: Larvae), Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Renewal, NA Larvae	Unmeasured	0 AI mg/L / 0.003 AI mg/L / 0.007 AI mg/L / 0.02 AI mg/L / 0.05 AI mg/L / 0.12 AI mg/L / 0.30 AI mg/L	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	EC50 (0.059 (0.044-0.079) AI mg/L)	Development/Growth	High	1942534
1222-05-5	5 Day(s), (5 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg, Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Renewal, NA Egg	Unmeasured	0 AI mg/L / 0.003 AI mg/L / 0.007 AI mg/L / 0.02 AI mg/L / 0.05 AI mg/L / 0.12 AI mg/L / 0.30 AI mg/L	Mortality (Mortality-Hatch, Response Site: Not reported)	NOEC (0.30 AI mg/L)	Mortality	High	1942534
1222-05-5	5 Day(s), (5 Day(s))	<i>Acartia tonsa</i> (Calanoid Copepod), Egg (Measured in: Larvae), Not Reported, Laboratory (FROM DANISH INST. FOR FISHERIES RESEARCH, ISOLATED FROM ORESUND IN 1981)	Salt water, Aqueous (aquatic habitat), Renewal, NA Larvae	Unmeasured	0 AI mg/L / 0.003 AI mg/L / 0.007 AI mg/L / 0.02 AI mg/L / 0.05 AI mg/L / 0.12 AI mg/L / 0.30 AI mg/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (0.30 AI mg/L)	Mortality	High	1942534
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Chironomus plumosus</i> (Midge), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 525.19 ug/L / 682.75 ug/L / 887.57 ug/L / 1153.85 ug/L / 1500.00 ug/L	Physiology (Intoxication-Immobile, Response Site: Not reported)	EC50 (861.2 (726.5-997.3) ug/L)	Immobilization	High	5428397

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	23 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	51 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	76 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	0 uM / >0- <=6.6 uM	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (288 (105-794) ug/L)	Mortality	High	5352378
1222-05-5	121 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	174 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	8 Day(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Biochemical (Enzyme(s)-Methoxyresorufin-o-deethylase, Response Site: Not reported)	NOEC (9.8 ug/L)	Mechanistic: Biomarkers (exposure and effect)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	8 Day(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Biochemical (Enzyme(s)-Pentylresorufin O-deethylase, Response Site: Not reported)	NOEC (9.8 ug/L)	Mechanistic: Biomarkers (exposure and effect)	High	5352378
1222-05-5	8 Day(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Biochemical (Enzyme(s)-7-Ethoxyresorufin O-deethylase, Response Site: Not reported)	NOEC (9.8 ug/L)	Mechanistic: Biomarkers (exposure and effect)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	243 Hour(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	12 Day(s), (12 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 4 Instar, Not Reported, Laboratory (DEPARTMENT OF AQUATIC ECOLOGY AND ECOTOXICOLOGY AT THE UNIVERSITY OF AMSTERDAM, AMSTERDAM, THE NETHERLANDS)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Whole organism)	NR (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Population (Population-Sex ratio, Response Site: Not reported)	NOEC (1000 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Emergence, Response Site: Not reported)	LOEC (500 mg/kg dw sediment)	Development/Growth	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	LOEC (>1000 mg/kg dw sediment)	Development/Growth	High	8784980

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Slowed, Retarded, Delayed or Non-development, Response Site: Not reported)	NOEC (1000 mg/kg dw sediment)	Development/Growth	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Emergence, Response Site: Not reported)	NOEC (250 mg/kg dw sediment)	Development/Growth	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (125-1000 mg/kg dw sediment)	Mortality	High	8784980

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Behavior (Behavior-Flight, Response Site: Not reported)	NR (62.5-1000 mg/kg dw sediment)	Behavioral	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Emergence, Response Site: Not reported)	EC15 (258.64 (163.73-434.87) mg/kg dw sediment)	Development/Growth	High	8784980
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus riparius</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (IN-HOUSE CULTURES)	Fresh water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 62.5 mg/kg dw sediment / 125 mg/kg dw sediment / 250 mg/kg dw sediment / 500 mg/kg dw sediment / 1000 mg/kg dw sediment	Growth (Development-Emergence, Response Site: Not reported)	EC50 (402.39 (260.28-828.71) mg/kg dw sediment)	Development/Growth	High	8784980

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus yoshimatsui</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (FROM NIES)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Organism	Unmeasured	0 ug/g sediment / 0.785 ug/g sediment / 1.57 ug/g sediment / 3.14 ug/g sediment / 6.28 ug/g sediment	Growth (Development-Emergence, Response Site: Not reported)	NOEC (3.14 ug/g sediment)	Development/Growth	High	5427931
1222-05-5	28 Day(s), (28 Day(s))	<i>Chironomus yoshimatsui</i> (Midge), Larva, 1 Instar, Not Reported, Laboratory (FROM NIES)	Fresh water, Aqueous (aquatic habitat), Sediment, 10 Organism	Unmeasured	0 ug/g sediment / 0.785 ug/g sediment / 1.57 ug/g sediment / 3.14 ug/g sediment / 6.28 ug/g sediment	Growth (Development-Emergence, Response Site: Not reported)	LOEC (6.28 ug/g sediment)	Development/Growth	High	5427931
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Daphnia magna</i> (Water Flea), 6-24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 mg/L / 0.10 mg/L / 0.18 mg/L / 0.32 mg/L / 0.56 mg/L / 1.02 mg/L / 1.83 mg/L / 3.16 mg/L / 5.56 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (0.568 (0.440-0.754) mg/L)	Immobilization	High	4690050
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Daphnia magna</i> (Water Flea), 6-24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 mg/L / 0.41 mg/L / 0.65 mg/L / 1.42 mg/L / 2.38 mg/L / 4.38 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (2.413 (2.128-2.769) mg/L)	Immobilization	High	4690050
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Daphnia magna</i> (Water Flea), 6-24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 mg/L / 0.10 mg/L / 0.18 mg/L / 0.32 mg/L / 0.56 mg/L / 1.02 mg/L / 1.83 mg/L / 3.16 mg/L / 5.56 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (0.194 (0.137-0.253) mg/L)	Immobilization	High	4690050

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Daphnia magna</i> (Water Flea), 6-24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 mg/L / 0.41 mg/L / 0.65 mg/L / 1.42 mg/L / 2.38 mg/L / 4.38 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (1.170 (0.757-1.973) mg/L)	Immobilization	High	4690050
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Daphnia magna</i> (Water Flea), Larva, <24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/mg / 1800.00 ug/L / 2160.00 ug/L / 2592.00 ug/L / 3110.40 ug/L / 3732.48 ug/L	Physiology (Intoxication-Immobile, Response Site: Not reported)	EC50 (2684 (2084-3745) ug/L)	Immobilization	High	5428397
1222-05-5	28 Day(s), (28 Day(s))	<i>Daphnia magna</i> (Water Flea), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Population (Population-Abundance, Response Site: Not reported)	NR (24.22-163.98 ug/L)	Development/Growth	Medium	5428151
1222-05-5	7 Day(s), (7 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, 20 Organism	Unmeasured	0 ug/L / 0 ug/L / 1.0 ug/L / 10 ug/L / 100 ug/L / 1000 ug/L	Physiology (Intoxication-Immobile, Response Site: Not reported)	NR (1.0-1000 ug/L)	Immobilization	High	7607958
1222-05-5	17 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, 10 Organism	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (418.5 ug/L)	Mortality	High	7607958
1222-05-5	21 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, 10 Organism	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (49.13 ug/L)	Mortality	High	7607958

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Physiology (Intoxication-Immobile, Response Site: Not reported)	EC50 (292.8 (204.8-418.5) ug/L)	Immobilization	High	7607958
1222-05-5	21 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, 10 Organism	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (110.9 ug/L)	Reproductive/Teratogenic	High	7607958
1222-05-5	21 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC50 (282.4 (259.7-312.2) ug/L)	Reproductive/Teratogenic	High	7607958
1222-05-5	21 Day(s), (21 Day(s))	<i>Daphnia magna</i> (Water Flea), <24 Hour(s), Not Reported, Laboratory (RCC LAB STOCK)	Culture, Aqueous (aquatic habitat), Renewal, 10 Organism	Measured	0 ug/L / 0 ug/L / 49.13 ug/L / 110.9 ug/L / 204.8 ug/L / 418.5 ug/L / 842.0 ug/L	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEC (204.8 ug/L)	Reproductive/Teratogenic	High	7607958
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	EC50 (53.52 (53.06-53.99) mg/kg dw sediment)	Development/Growth	High	8784982

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	LC15 (47.95 (32.00-71.84) mg/kg dw sediment)	Mortality	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (62.47 (49.79-78.40) mg/kg dw sediment)	Mortality	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Growth (Growth-Biomass, Response Site: Not reported)	LOEC (200.0 mg/kg dw sediment)	Development/Growth	High	8784982

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Behavior (Behavior-Behavioral changes, general, Response Site: Not reported)	NR (6.0-200.0 mg/kg dw sediment)	Behavioral	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	LOEC (34.7 mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (83.3 mg/kg dw sediment)	Mortality	High	8784982

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Growth (Growth-Length, Response Site: Whole organism)	NOEC (14.5 mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	NOEC (14.5 mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (34.7 mg/kg dw sediment)	Mortality	High	8784982

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	EC15 (34.78 (34.36-35.19) mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Growth (Growth-Length, Response Site: Whole organism)	LOEC (34.7 mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (200.0 mg/kg dw sediment)	Mortality	High	8784982

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Hyaella azteca</i> (Scud), Juvenile, 7-14 Day(s), Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM DRESDEN UNIVERSITY OF TECHNOLOGY, GERMANY)	Culture, Aqueous (aquatic habitat), Sediment, Not Reported	Chemical analysis reported	0 mg/kg dw sediment / 0 mg/kg dw sediment / 6.0 mg/kg dw sediment / 14.5 mg/kg dw sediment / 34.7 mg/kg dw sediment / 83.3 mg/kg dw sediment / 200.0 mg/kg dw sediment	Growth (Growth-Biomass, Response Site: Not reported)	NOEC (83.3 mg/kg dw sediment)	Development/Growth	High	8784982
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Macrobrachium nipponense</i> (Oriental River Shrimp), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 265.49 ug/L / 300.00 ug/L / 339.00 ug/L / 383.07 ug/L / 432.87 ug/L / 489.14 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (354.9 (326.8-382.0) ug/L)	Mortality	High	5428397
1222-05-5	28 Day(s), (28 Day(s))	<i>Macrobrachium nipponense</i> (Oriental River Shrimp), Fry, <1 Month(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 58.61 ug/L / 70.33 ug/L / 84.39 ug/L / 101.27 ug/L / 121.53 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC10 (52.87 (37.18-62.62) ug/L)	Mortality	High	5428397
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Nitocra spinipes</i> (Harpacticoid Copepod), Adult, Not Reported, Laboratory (FROM A STOCK CULTURE ISO-LATED FROM A SEDIMENT SAMPLE IN THE TVAREN BAY, BALTIC SEA)	Salt water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Unmeasured	0.06-3.0 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (1.90 (1.40-2.70) mg/L)	Mortality	Medium	1417909

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7-8 Day(s), (26 Day(s))	<i>Nitocra spinipes</i> (Harpacticoid Copepod), Nauplii, Both, Laboratory (FROM A STOCK CULTURE ISOLATED FROM A SEDIMENT SAMPLE IN THE TVAREN BAY, BALTIC SEA)	Salt water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ng/ml / 0 ng/ml / 0.2-1.8 ng/ml / 0.7-8.2 ng/ml / 3.6-20 ng/ml / 7.1-69 ng/ml / 34-113 ng/ml	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEC (34-113 ng/ml)	Mortality	High	1417909
1222-05-5	22 Day(s), (26 Day(s))	<i>Nitocra spinipes</i> (Harpacticoid Copepod), Nauplii, Both, Laboratory (FROM A STOCK CULTURE ISOLATED FROM A SEDIMENT SAMPLE IN THE TVAREN BAY, BALTIC SEA)	Salt water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ng/ml / 0 ng/ml / 0.2-1.8 ng/ml / 0.7-8.2 ng/ml / 3.6-20 ng/ml / 7.1-69 ng/ml / 34-113 ng/ml	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEC (0.7-8.2 ng/ml)	Development/Growth	High	1417909
1222-05-5	22 Day(s), (26 Day(s))	<i>Nitocra spinipes</i> (Harpacticoid Copepod), Nauplii, Both, Laboratory (FROM A STOCK CULTURE ISOLATED FROM A SEDIMENT SAMPLE IN THE TVAREN BAY, BALTIC SEA)	Salt water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ng/ml / 0 ng/ml / 0.2-1.8 ng/ml / 0.7-8.2 ng/ml / 3.6-20 ng/ml / 7.1-69 ng/ml / 34-113 ng/ml	Growth (Development-Metamorphosis, Response Site: Not reported)	LOEC (3.6-20 ng/ml)	Development/Growth	High	1417909

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	<=26 Day(s), (26 Day(s))	<i>Nitocra spinipes</i> (Harpacticoid Copepod), Nauplii, Both, Laboratory (FROM A STOCK CULTURE ISOLATED FROM A SEDIMENT SAMPLE IN THE TVAREN BAY, BALTIC SEA)	Salt water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 ng/ml / 0 ng/ml / 0.2-1.8 ng/ml / 0.7-8.2 ng/ml / 3.6-20 ng/ml / 7.1-69 ng/ml / 34-113 ng/ml	Population (Population-Abundance, Response Site: Not reported)	NR (0.2-113 ng/ml)	Reproductive/Teratogenic	High	1417909
1222-05-5	28 Day(s), (28 Day(s))	<i>Orthocladinae</i> (Midge Subfamily), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Population (Population-Abundance, Response Site: Not reported)	NR (24.22-163.98 ug/L)	Development/Growth	Medium	5428151
1222-05-5	3 Hour(s), (3 Hour(s))	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp), Not reported, Not Reported, Laboratory (SALINA EL POPULO AQUACULTURE FARM, SAN FERNANDO, SPAIN)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Not reported	0 ug/L / 0 ug/L / 0.005-0.006 ug/L / 0.04-0.08 ug/L / 0.452-0.699 ug/L / 2.418-3.01 ug/L / 21.732-31.311 ug/L	Behavior (Avoidance-Chemical avoidance, Response Site: Not reported)	EC50 (14.1 (5.2-61.2) ug/L)	Behavioral	High	5400911

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Hour(s), (3 Hour(s))	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp), Not reported, Not Reported, Laboratory (SALINA EL POPULO AQUACULTURE FARM, SAN FERNANDO, SPAIN)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 0.005-0.006 ug/L / 0.04-0.08 ug/L / 0.452-0.699 ug/L / 2.418-3.01 ug/L / 21.732-31.311 ug/L	Behavior (Avoidance-Chemical avoidance, Response Site: Not reported)	NOEC (0.452-0.699 ug/L)	Behavioral	High	5400911
1222-05-5	3 Hour(s), (3 Hour(s))	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp), Not reported, Not Reported, Laboratory (SALINA EL POPULO AQUACULTURE FARM, SAN FERNANDO, SPAIN)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Measured	0 ug/L / 0 ug/L / 0.005-0.006 ug/L / 0.04-0.08 ug/L / 0.452-0.699 ug/L / 2.418-3.01 ug/L / 21.732-31.311 ug/L	Behavior (Avoidance-Chemical avoidance, Response Site: Not reported)	LOEC (2.418-3.01 ug/L)	Behavioral	High	5400911
1222-05-5	3 Hour(s), (3 Hour(s))	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp), Not reported, Not Reported, Laboratory (SALINA EL POPULO AQUACULTURE FARM, SAN FERNANDO, SPAIN)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Not reported	0 ug/L / 0 ug/L / 0.005-0.006 ug/L / 0.04-0.08 ug/L / 0.452-0.699 ug/L / 2.418-3.01 ug/L / 21.732-31.311 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>50 ug/L)	Mortality	High	5400911

Continued on next page ...

...continued from previous page

Aquatic: Arthropods Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (24 Hour(s))	<i>Palaemonetes varians</i> (Grass Or Atlantic Ditch Shrimp), Not reported, Not Reported, Laboratory (SALINA EL POPULO AQUACULTURE FARM, SAN FERNANDO, SPAIN)	Salt water, Aqueous (aquatic habitat), Static, Not Reported	Not reported	0 ug/L / 0 ug/L / 0.005-0.006 ug/L / 0.04-0.08 ug/L / 0.452-0.699 ug/L / 2.418-3.01 ug/L / 21.732-31.311 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>50 ug/L)	Mortality	High	5400911

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Pelophylax nigromaculatus</i> (Black-Spotted Frog), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 17.36 ug/L / 20.83 ug/L / 25.00 ug/L / 30.00 ug/L / 36.00 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (35.35 (30.75-48.51) ug/L)	Mortality	High	5428397
1222-05-5	NA Until metamorphosis, (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Cellular (Histology-Colloids,Hyperplasia,Hypertrophy, Response Site: Thyroid)	NR (163.4-2028.4 ng/g wet wt diet)	Endocrine	High	3007206
1222-05-5	NA Until metamorphosis, (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Growth-Snout-vent length, Response Site: Whole organism)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	NA Until metamorphosis, (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Accumulation (Accumulation-Assimilation of test chemical, Response Site: Whole organism)	NOEL (883.6-1432.5 ng/g wet wt diet)	ADME (bio-transformation)	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	NA Until metamorphosis, (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (163.4-2028.4 ng/g wet wt diet)	Mortality	High	3007206
1222-05-5	14 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Stage, Response Site: Not reported)	NOEL (163.4-643.7 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	14 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Growth-Length, Response Site: Whole organism)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Morphology-Length, Response Site: Hindlimb)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	14 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Stage, Response Site: Not reported)	LOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	23 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Morphology-Length, Response Site: Hindlimb)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	23 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	23 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Growth-Snout-vent length, Response Site: Whole organism)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	23 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Stage, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	32 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	35 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	36 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	37 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	39 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	42 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

Continued on next page ...

...continued from previous page

Aquatic: Amphibian Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	44 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206
1222-05-5	46 Day(s), (NA Until metamorphosis)	<i>Xenopus laevis</i> (African Clawed Frog), Larva, 46 Nieuwkoop-faber-stage, Not Reported, Laboratory (CAME FROM IN HOUSE BREEDING ADULT ANIMALS IN LABORATORY)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ng/g wet wt diet / 593.2-1026.5 ng/g wet wt diet / 302.5-2028.4 ng/g wet wt diet / 163.4-643.7 ng/g wet wt diet / 883.6-1432.5 ng/g wet wt diet	Growth (Development-Metamorphosis, Response Site: Not reported)	NOEL (883.6-1432.5 ng/g wet wt diet)	Development/Growth	High	3007206

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Liver)	LOEC (75 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Liver)	NOEC (15 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Liver)	NOEC (150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Catalase, Response Site: Liver)	NOEC (150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Liver)	NOEC (150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	7 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Liver)	NR (0.15-150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Liver)	LOEC (75 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Catalase, Response Site: Liver)	NOEC (1.5 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Liver)	NOEC (1.5 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Liver)	NOEC (15 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Liver)	LOEC (15 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	14 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)- Catalase, Response Site: Liver)	LOEC (15 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Liver)	NOEC (150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	21 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Liver)	NOEC (150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	21 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Catalase, Response Site: Liver)	NR (0.15-150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	21 Day(s), (21 Day(s))	<i>Carassius auratus</i> (Goldfish), Not reported, Not Reported, Laboratory (PURCHASED FROM AQUATIC STORE IN TIAN-JIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 ug/L / 0 ug/L / 0 ug/L / 0.15 ug/L / 1.5 ug/L / 15 ug/L / 75 ug/L / 150 ug/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Liver)	NR (0.15-150 ug/L)	Mechanistic: Oxidative stress (including redox biology)	High	4648141
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEC (1000 ug/L)	Mortality	Low	5185657

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Growth (Development-Abnormal, Response Site: Not reported)	NOEC (1000 ug/L)	Development/Growth	Low	5185657
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Behavior (Behavior-Motility, Response Site: Not reported)	NOEC (1000 ug/L)	Behavioral	Low	5185657
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEC (1000 ug/L)	Mortality	Low	5185657
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Growth (Development-Abnormal, Response Site: Not reported)	NOEC (1000 ug/L)	Development/Growth	Low	5185657
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Physiology (Physiology-Blood flow, Response Site: Artery)	NOEC (1000 ug/L)	Cardiovascular	Low	5185657
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Cellular (Histology-Edema, Response Site: Whole organism)	NOEC (1000 ug/L)	Development/Growth	Low	5185657
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, 4 Cell stage, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Not reported, Not Reported	Unmeasured	0 ug/L / 1.0-1000 ug/L	Physiology (Physiology-Heart rate, Response Site: Heart)	NOEC (1000 ug/L)	Cardiovascular	Low	5185657

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Transthyretin (prealbumin, amyloidosis type I) mRNA, Response Site: Not reported)	NR (0.11-3.38 ug/L)	Mechanistic: Endocrine toxicity	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Corticotropin releasing hormone b mRNA, Response Site: Not reported)	NR (0.11-3.38 ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 15 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Growth associated protein 43 mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 15 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Myelin basic protein A mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, NA Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Behavior (Behavior-Distance moved, change in direct movement, Response Site: Not reported)	NR (0.11-3.38 ug/L)	Behavioral	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, NA Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Behavior (Behavior-Distance moved, change in direct movement, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Behavioral	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-UDP glucuronosyl-transferase 1 family a, b mRNA, Response Site: Not reported)	LOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, NA Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Behavior (Behavior-Distance moved, change in direct movement, Response Site: Not reported)	NR (0.11-3.38 ug/L)	Behavioral	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, NA Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Behavior (Behavior-Distance moved, change in direct movement, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Behavioral	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Type II iodothyronine deiodinase mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Endocrine toxicity	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Type I iodothyronine deiodinase mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Endocrine toxicity	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-SULT1 isoform 5 mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, NA Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Behavior (Behavior-Distance moved, change in direct movement, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Behavioral	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Thyroglobulin mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-SLC5A5 mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-UDP glucuronosyl-transferase 1 family a, b mRNA, Response Site: Not reported)	NOEC (0.96 ug/L)	Mechanistic: Cell signaling/function	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Krueppel-like factor 9, Response Site: Not reported)	NR (0.11-3.38 ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Biochemical (Hormone(s)-Thyroxine, Response Site: Whole organism)	LOEC (0.13 (0.11-0.15) ug/L)	Mechanistic: Endocrine toxicity	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILDTYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 15 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-c-fos mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (FERTILIZED EGGS HARVESTED IN-HOUSE FROM SEXUALLY MATURE ZEBRAFISH PAIRS (WILD-TYPE GREATER THAN 6 MONTHS OLD) (ENVIRONMENTAL TOXICOLOGY LABORATORY AT SEOUL NATIONAL UNIVERSITY, SEOUL, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 15 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Synapsin IIa mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368
1222-05-5	120 Hour(s), (5 Day(s))	<i>Danio rerio</i> (Zebra Danio), Embryo, <=4 Hours post fertilization (Measured in: Larvae), Not Reported, Laboratory (COMMERCIAL HATCHERY (GANGNAM AQUARIUM, SUWON, KOREA))	Fresh water, Aqueous (aquatic habitat), Renewal, 200 Larvae	Measured	0 ug/L / 0.13 (0.11-0.15) ug/L / 0.34 ug/L / 0.96 ug/L / 3.10 (2.82-3.38) ug/L	Cellular (Genetics-Thyroid Stimulating Hormone beta mRNA, Response Site: Not reported)	NOEC (3.10 (2.82-3.38) ug/L)	Mechanistic: Cell signaling/function	High	11791368

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	12 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (11.17 mg/L)	Mortality	Medium	3405953
1222-05-5	24 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (9.26 mg/L)	Mortality	Medium	3405953
1222-05-5	1 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	1 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	1 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	1 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	48 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality- Mortality, Response Site: Not reported)	LC50 (6.5 mg/L)	Mortality	Medium	3405953
1222-05-5	2 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry- Malondialdehyde, Response Site: Whole organism)	NOEC (0.170 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	2 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Whole organism)	LOEC (0.370 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	2 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	2 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	2 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (6.05 mg/L)	Mortality	Medium	3405953
1222-05-5	96 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (4.45 mg/L)	Mortality	Medium	3405953
1222-05-5	4 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	4 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	4 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	4 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	120 Hour(s), (120 Hour(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 1.47 mg/L / 2.15 mg/L / 3.16 mg/L / 4.64 mg/L / 6.81 mg/L / 10.00 mg/L / 14.68 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (3.63 mg/L)	Mortality	Medium	3405953
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Whole organism)	LOEC (0.083 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Whole organism)	NOEC (0.042 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Biochemistry-Malondialdehyde, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Whole organism)	NR (0.042-0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (0.710 mg/L)	Mortality	Medium	3405953

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Danio rerio</i> (Zebra Danio), Not reported, Not Reported, Laboratory (PURCHASED FROM A LOCAL FISH MARKET IN TIANJIN, CHINA)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.042 mg/L / 0.083 mg/L / 0.170 mg/L / 0.370 mg/L / 0.710 mg/L	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Whole organism)	NOEC (0.710 mg/L)	Mechanistic: Oxidative stress (including redox biology)	Medium	3405953
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Gobiocypris rarus</i> (Chinese Rare Minnow), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 350.13 ug/L / 455.17 ug/L / 591.72 ug/L / 769.23 ug/L / 1000.00 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (753.8 (705.3-808.4) ug/L)	Mortality	High	5428397
1222-05-5	28 Day(s), (28 Day(s))	<i>Gobiocypris rarus</i> (Chinese Rare Minnow), Fry, <3 Month(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 124.56 ug/L / 168.15 ug/L / 227.01 ug/L / 306.46 ug/L / 413.72 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC10 (186.1 (145.8-215.0) ug/L)	Mortality	High	5428397
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Unmeasured	10 ug/L / 20 ug/L / 50 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (50 ug/L)	Mortality	Low	5352386
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Residual, remnant, carcass)	BCF (7.03-10.75 ug/L)	ADME (bio-transformation)	High	5352386

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Edible tissue)	BCF (7.03-10.75 ug/L)	ADME (bio-transformation)	High	5352386
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Whole organism)	BCF (0.76-1.15 ug/L)	ADME (bio-transformation)	High	5352386
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Whole organism)	BCF (7.03-10.75 ug/L)	ADME (bio-transformation)	High	5352386
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Edible tissue)	BCF (0.76-1.15 ug/L)	ADME (bio-transformation)	High	5352386

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (56 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC., LAKE ROAD 54-56, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0.76-1.15 ug/L / 7.03-10.75 ug/L	Accumulation (Accumulation-Residue, Response Site: Residual, remnant, carcass)	BCF (0.76-1.15 ug/L)	ADME (bio-transformation)	High	5352386
1222-05-5	14-42 Day(s), (42 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (FROM OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ug/g bdwt / 548 (544-553) ug/g bdwt	Biochemical (Biochemistry-Lipid, Response Site: Whole organism)	NR (548 (544-553) ug/g bdwt)	Nutritional and Metabolic	High	7607948
1222-05-5	14-42 Day(s), (42 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (FROM OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ug/g bdwt / 548 (544-553) ug/g bdwt	Accumulation (Accumulation-Residue, Response Site: Gill(s), Whole organism)	NR (548 (544-553) ug/g bdwt)	ADME (bio-transformation)	High	7607948
1222-05-5	42 Day(s), (42 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (FROM OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ug/g bdwt / 548 (544-553) ug/g bdwt	Growth (Growth-Growth rate, Response Site: Not reported)	NOEC (548 (544-553) ug/g bdwt)	Development/Growth	High	7607948

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14-42 Day(s), (42 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (FROM OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Oral (diet, drink, gavage), Food, Not Reported	Measured	0 ug/g bdwt / 548 (544-553) ug/g bdwt	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (548 (544-553) ug/g bdwt)	Mortality	High	7607948
1222-05-5	24 Hour(s), (96 Hour(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 5 Organism	Unmeasured	0 ug/L / 0 ug/L / 2000 ug/L / 10000 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (10000 ug/L)	Mortality	Uninformative	7607846
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 5 Organism	Unmeasured	0 ug/L / 0 ug/L / 10 ug/L / 100 ug/L / 1000 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (1000 ug/L)	Mortality	Uninformative	7607846
1222-05-5	14 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (830.0 ug/L)	Mortality	High	7607846

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (181.8 ug/L)	Development/Growth	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Growth (Growth-Weight, Response Site: Whole organism)	LOEC (393.0 ug/L)	Development/Growth	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (393.0 ug/L)	Development/Growth	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Behavior (Behavior-Observed stress, Response Site: Not reported)	LOEC (181.8 ug/L)	Behavioral	High	7607846

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Growth (Growth-Weight, Response Site: Whole organism)	NOEC (181.8 ug/L)	Development/Growth	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Behavior (Behavior-Equilibrium, Righting response, Swimming, Response Site: Not reported)	NR (92.5-1566 ug/L)	Behavioral	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (452.3 (316.2-910.7) ug/L)	Mortality	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (92.5 ug/L)	Mortality	High	7607846

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Physiology (Physiology-Respiration, Response Site: Whole organism)	NOEC (92.5 ug/L)	Respiratory	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Physiology (Physiology-Respiration, Response Site: Whole organism)	LOEC (181.8 ug/L)	Respiratory	High	7607846
1222-05-5	21 Day(s), (21 Day(s))	<i>Lepomis macrochirus</i> (Bluegill), Not reported, Not Reported, Laboratory (OSAGE CATFISHERIES INC, OSAGE BEACH, MISSOURI)	Fresh water, Aqueous (aquatic habitat), Flow-through, 10 Organism	Measured	0 ug/L / 0 ug/L / 92.5 ug/L / 181.8 ug/L / 393.0 ug/L / 830.0 ug/L / 1566 ug/L	Behavior (Behavior-Observed stress, Response Site: Not reported)	NOEC (92.5 ug/L)	Behavioral	High	7607846
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Misgurnus anguillicaudatus</i> (Oriental Weatherfish), Larva, Not Reported, Laboratory (LOACH CULTIVATION PLANT, TONGZHOU, BEIJING)	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 375.66 ug/L / 413.22 ug/L / 454.55 ug/L / 500.00 ug/L / 550.00 ug/L / 605.00 ug/L / 665.50 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (491.2 (464.3-511.8) ug/L)	Mortality	High	5428397

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Estrogen receptor alpha mRNA, Response Site: Liver)	NOEC (0.14-49 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Vitellogenin 2 mRNA, Response Site: Liver)	LOEC (0.14-49 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Biochemical (Biochemistry- Vitellogenin, Response Site: Liver)	LOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Cytochrome P450 3A40 mRNA, Response Site: Liver)	LOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Estrogen receptor alpha mRNA, Response Site: Liver)	LOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Vitellogenin 1 mRNA, Response Site: Liver)	LOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Cytochrome P450 3A40 mRNA, Response Site: Liver)	NOEC (0.14-49 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Vitellogenin 1 mRNA, Response Site: Liver)	NOEC (0.14-49 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Vitellogenin 2 mRNA, Response Site: Liver)	NOEC (<0.020-4.8 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Estrogen receptor beta mRNA, Response Site: Liver)	NOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Pregnane X receptor mRNA, Response Site: Liver)	NOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Cellular (Genetics- Cytochrome P450 3A38 mRNA, Response Site: Liver)	NOEC (0.46-434 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Oryzias latipes</i> (Japanese Medaka), Adult, 4 Months post-hatch, Male, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Measured	0 mg/L / 0 mg/L / <0.020-4.8 mg/L / 0.14-49 mg/L / 0.46-434 mg/L	Biochemical (Biochemistry-Vitellogenin, Response Site: Liver)	NOEC (0.14-49 mg/L)	Mechanistic: Biomarkers (exposure and effect); Receptor binding/ regulation of receptor activity	High	5352387
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Oryzias latipes</i> (Japanese Medaka), Larva, 24 Hour(s), Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Unmeasured	0 mg/L / 0.60-1.5 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (0.95 (0.91-1.01) mg/L)	Mortality	Uninformative	5352387
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Oryzias sinensis</i> (Chinese Medaka), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 839.71 ug/L / 923.68 ug/L / 1016.05 ug/L / 1117.66 ug/L / 1229.42 ug/L / 1352.37 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (839.2 (690.3-916.4) ug/L)	Mortality	High	5428397
1222-05-5	4 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fathead Minnow), Embryo, <24 Hour(s), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Embryo	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Mortality (Mortality-Hatch, Response Site: Not reported)	NOEC (140 (120-160) ug/L)	Mortality	High	7607847
1222-05-5	4 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fathead Minnow), Embryo, <24 Hour(s), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Embryo	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Mortality (Mortality-Hatch, Response Site: Not reported)	LOEC (>140 (120-160) ug/L)	Mortality	High	7607847

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Behavior (Behavior-Coordination,Equilibrium, Response Site: Not reported)	NR (140 (120-160) ug/L)	Behavioral	Uninformative	7607847
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (68 (57-85) ug/L)	Mortality	High	7607847
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Growth (Growth-Weight, Response Site: Whole organism)	NOEC (68 (57-85) ug/L)	Development/Growth	High	7607847

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RE-SEARCH OR-GANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (68 (57-85) ug/L)	Development/Growth	High	7607847
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RE-SEARCH OR-GANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (140 (120-160) ug/L)	Mortality	High	7607847
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RE-SEARCH OR-GANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Growth (Growth-Weight, Response Site: Whole organism)	LOEC (140 (120-160) ug/L)	Development/Growth	High	7607847

Continued on next page ...

...continued from previous page

Aquatic: Fish Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, 80 Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (140 (120-160) ug/L)	Development/Growth	High	7607847
1222-05-5	36 Day(s), (36 Day(s))	<i>Pimephales promelas</i> (Fat-head Minnow), Embryo, <24 Hour(s) (Measured in: Larvae), Not Reported, Laboratory (FROM AQUATIC RESEARCH ORGANISMS, HAMPTON, NEW YORK)	Fresh water, Aqueous (aquatic habitat), Flow-through, NA Larvae	Measured	<3.1 ug/L / <3.1 ug/L / 9.1 (7.3-11) ug/L / 19 (14-26) ug/L / 37 (25-46) ug/L / 68 (57-85) ug/L / 140 (120-160) ug/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>140 (120-160) ug/L)	Mortality	High	7607847

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 30 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Growth (Growth-Growth, general, Response Site: Whole organism)	NOEC (>100 ug/g dry wt sediment)	Development/Growth	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 30 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (30 ug/g dry wt sediment)	Mortality	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 30 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Biochemical (Biochemistry-General biochemical effect, Response Site: Not reported)	LOEC (30 ug/g dry wt sediment)	Mechanistic: Genotox (including DNA repair)	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 30 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (100 ug/g dry wt sediment)	Mortality	High	5428154

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Accumulation (Accumulation-Residue, Response Site: Whole organism)	NR (24.22-163.98 ug/L)	ADME (bio-transformation)	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (24.22 ug/L)	Mortality	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Branchiura sowerbyi</i> (Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (67.79 ug/L)	Mortality	High	5428151
1222-05-5	14 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Juvenile	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Growth-Volume, Response Site: Whole organism)	NOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	29.29 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	32.30 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Juvenile	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	NOEC (123.45 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	32.30 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 57 Juvenile	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	LOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	33.41 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 22 Male organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	LOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	33.41 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Male organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	NOEC (123.45 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	36.56 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 9 Both male and female	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	LOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36.56 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Both male and female	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Development-Maturity, Response Site: Not reported)	NOEC (123.45 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	36.56 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Growth-Volume, Response Site: Whole organism)	NOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	41.80 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Time to first progeny, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	41.80 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Growth-Volume, Response Site: Whole organism)	NOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	42 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Growth-Volume, Response Site: Whole organism)	LOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042
1222-05-5	42 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Growth (Growth-Volume, Response Site: Whole organism)	NOEC (123.45 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28-42 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aquatic (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Behavior (Feeding behavior-Fecal production, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Behavioral	High	5428042
1222-05-5	44 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aquatic (aquatic habitat), Sediment, 80 Juvenile	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (25.76 mg/kg dw sediment)	Mortality	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	44 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 80 Juvenile	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (123.45 mg/kg dw sediment)	Mortality	High	5428042
1222-05-5	43-56 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Behavior (Feeding behavior-Fecal production, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Behavioral	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	57-70 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Behavior (Feeding behavior-Fecal production, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Behavioral	High	5428042
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Egg), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Egg	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (1.46 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Number of days between eggs laid or litters, Response Site: Not reported)	NOEC (1.46 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Egg), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Egg	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEC (25.76 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Reproductive capacity, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Number of days between eggs laid or litters, Response Site: Not reported)	LOEC (25.76 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Eggs per nest, Response Site: Not reported)	NOEC (25.76 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Egg), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Egg	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Eggs per nest, Response Site: Not reported)	LOEC (123.45 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	78.96 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Reproduction (Reproduction-Mean spawns per female, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	114 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, Not Reported	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Population (Population-Population growth rate, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Development/Growth	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	114 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, NA Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Population (Population-Sex ratio, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Reproductive/Teratogenic	High	5428042
1222-05-5	114 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s) (Measured in: Adult), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 20 Adult	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Mortality	High	5428042

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	114 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Female organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Mortality	High	5428042
1222-05-5	114 Day(s), (114 Day(s))	<i>Capitella capitata</i> (Polychaete Worm), Juvenile, 5 Day(s), Not Reported, Laboratory (STOCK CULTURE MAINTAINED IN LAB 20 YEARS, ORIGINALLY FROM SETAUKET HARBOR, LONG ISLAND, NEW YORK)	Salt water, Aqueous (aquatic habitat), Sediment, 10 Male organisms	Measured	0.00 mg/kg dw sediment / 1.46 mg/kg dw sediment / 25.76 mg/kg dw sediment / 123.45 mg/kg dw sediment / 168.19 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (168.19 mg/kg dw sediment)	Mortality	High	5428042
1222-05-5	96 Hour(s), (96 Hour(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Larva, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Renewal, Not Reported	Chemical analysis reported	<10.70 ng/L / 520.00 ug/L / 676.00 ug/L / 878.80 ug/L / 1142.44 ug/L / 1485.17 ug/L / 1930.72 ug/L / 2509.94 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (2025 (1646-2788) ug/L)	Mortality	High	5428397

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 240 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (200 ug/g dry wt sediment)	Mortality	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 240 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (100 ug/g dry wt sediment)	Mortality	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 240 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Biochemical (Biochemistry-General biochemical effect, Response Site: Not reported)	LOEC (100 ug/g dry wt sediment)	Mechanistic: Genotox (including DNA repair)	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 240 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Growth (Growth-Growth, general, Response Site: Whole organism)	NOEC (>100 ug/g dry wt sediment)	Development/Growth	High	5428154

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported	Fresh water, Aqueous (aquatic habitat), Sediment, 240 Organism	Unmeasured	0 ug/g dry wt sediment / 30 ug/g dry wt sediment / 100 ug/g dry wt sediment / 200 ug/g dry wt sediment / 300 ug/g dry wt sediment	Biochemical (Biochemistry-General biochemical effect, Response Site: Not reported)	NOEC (30 ug/g dry wt sediment)	Mechanistic: Genotox (including DNA repair)	High	5428154
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (118.47 ug/L)	Mortality	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (67.79 ug/L)	Mortality	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Limnodrilus hoffmeisteri</i> (Tubificid Worm, Oligochaete), Not reported, Not Reported, Not reported (AQUATIC MARKET, GUANGZHOU, CHINA)	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Accumulation (Accumulation-Residue, Response Site: Whole organism)	NR (24.22-163.98 ug/L)	ADME (bio-transformation)	High	5428151

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	0.5 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	1 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	2 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	4 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	8 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	24 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	49 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	73.5 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	120 Hour(s), (120 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Static, Not Reported	Chemical analysis reported	0 uM / >0- <=6.6 uM	Physiology (Intoxication-Immobile, Response Site: Not reported)	EC50 (394 (221-706) ug/L)	Immobilization	High	5352378
1222-05-5	194 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	239 Hour(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	BCF (9.8 ug/L)	ADME (bio-transformation)	High	5352378
1222-05-5	12 Day(s), (290 Hour(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Flow-through, Not Reported	Chemical analysis reported	0 ug/L / 9.8 ug/L	Accumulation (Accumulation-Residue, Response Site: Not reported)	NR (9.8 ug/L)	ADME (bio-transformation)	High	5352378

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	100 mg/kg dw sediment / 1000 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (1000 mg/kg dw sediment)	Mortality	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Growth (Growth-Limb/ body part regeneration, Response Site: Not reported)	NR (5.0-140.0 mg/kg dw sediment)	Development/Growth	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC15 (24.1 (1.8-42.1) mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC50 (74.1 (42.5-165.7) mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	NOEC (60.9 mg/kg dw sediment)	Development/Growth	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	EC50 (97.7 (77.7-119.7) mg/kg dw sediment)	Development/Growth	High	8784981

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	LOEC (140.0 mg/kg dw sediment)	Development/Growth	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEC (26.5 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEC (60.9 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (11.5 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	NOEC (140.0 mg/kg dw sediment)	Mortality	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEC (26.5 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Mortality (Mortality-Survival, Response Site: Not reported)	LOEC (>140.0 mg/kg dw sediment)	Mortality	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	100 mg/kg dw sediment / 1000 mg/kg dw sediment	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (100 mg/kg dw sediment)	Mortality	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	100 mg/kg dw sediment / 1000 mg/kg dw sediment	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NR (100 mg/kg dw sediment)	Reproductive/Teratogenic	High	8784981

Continued on next page ...

...continued from previous page

Aquatic: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not Reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Population (Population-Biomass, Response Site: Not reported)	EC15 (62.4 (37.7-78.3) mg/kg dw sediment)	Development/Growth	High	8784981
1222-05-5	28 Day(s), (28 Day(s))	<i>Lumbriculus variegatus</i> (Oligochaete, Worm), Adult, Not Reported, Laboratory (LAB CULTURED, ORIGINALLY FROM FIS-CHFUTTER ETZBACH, MECHERNICH-BERGHEIM, GERMANY)	Fresh water, Aqueous (aquatic habitat), Sediment, Not reported	Unmeasured	0 mg/kg dw sediment / 0 mg/kg dw sediment / 5.0 mg/kg dw sediment / 11.5 mg/kg dw sediment / 26.5 mg/kg dw sediment / 60.9 mg/kg dw sediment / 140.0 mg/kg dw sediment	Behavior (Behavior-Burrowing behavior, burrowing length, Response Site: Not reported)	NR (5.0-140.0 mg/kg dw sediment)	Behavioral	Uninformative	8784981

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Aquatic: Non-vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Chlorophyta</i> (Green Algae Division), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Not reported)	LOEC (118.47 ug/L)	Mechanistic: Photosynthesis	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Chlorophyta</i> (Green Algae Division), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Not reported)	LOEC (163.98 ug/L)	Mechanistic: Photosynthesis	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Chlorophyta</i> (Green Algae Division), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Not reported)	NOEC (118.47 ug/L)	Mechanistic: Photosynthesis	High	5428151
1222-05-5	28 Day(s), (28 Day(s))	<i>Chlorophyta</i> (Green Algae Division), Not reported, Not Reported, Laboratory	Fresh water, Aqueous (aquatic habitat), Aquatic - not reported, Not Reported	Measured	<0.002 ug/L / <0.003 ug/L / 24.22 ug/L / 67.79 ug/L / 118.47 ug/L / 163.98 ug/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Not reported)	NOEC (67.79 ug/L)	Mechanistic: Photosynthesis	High	5428151
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITAT GOTTINGEN, GOTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population-Biomass, Response Site: Not reported)	EC50 (410 ug/L)	Development/Growth	Low	7607844

Continued on next page ...

...continued from previous page

Aquatic: Non-vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population- Population growth rate, Response Site: Not reported)	EC50 (>786.0 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population- Biomass, Response Site: Not reported)	LOEC (786.0 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population- Population growth rate, Response Site: Not reported)	LOEC (786.0 ug/L)	Development/Growth	Low	7607844

Continued on next page ...

...continued from previous page

Aquatic: Non-vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITAT GOTTINGEN, GOTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population-Biomass, Response Site: Not reported)	NOEC (82.1 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITAT GOTTINGEN, GOTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 0 ug/L / 29.7 ug/L / 82.1 ug/L / 786.0 ug/L	Population (Population-Population growth rate, Response Site: Not reported)	NOEC (82.1 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITAT GOTTINGEN, GOTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population-Biomass, Response Site: Not reported)	EC50 (723 (678.1-777.6) ug/L)	Development/Growth	Low	7607844

Continued on next page ...

...continued from previous page

Aquatic: Non-vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population- Population growth rate, Response Site: Not reported)	EC50 (>853.5 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population- Biomass, Response Site: Not reported)	LOEC (466.0 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population- Population growth rate, Response Site: Not reported)	LOEC (466.0 ug/L)	Development/Growth	Low	7607844

Continued on next page ...

...continued from previous page

Aquatic: Non-vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population-Biomass, Response Site: Not reported)	NOEC (201.4 ug/L)	Development/Growth	Low	7607844
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Raphidocelis subcapitata</i> (Green Algae), Not reported, Not Reported, Laboratory (FROM PFLANZEN-PHYSIOLOGISCHES INSTITUT DER UNIVERSITÄT GÖTTINGEN, GÖTTINGEN, GERMANY)	Culture, Aqueous (aquatic habitat), Not reported, Not Reported	Measured	0 ug/L / 0 ug/L / 42.2 ug/L / 84.3 ug/L / 201.4 ug/L / 466.0 ug/L / 853.5 ug/L	Population (Population-Population growth rate, Response Site: Not reported)	NOEC (201.4 ug/L)	Development/Growth	Low	7607844

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	LOEL (37.0 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC50 (12.4 (12.0-12.9) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (12.3 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (111 mg/kg dry soil)	Mortality	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (12.3 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (4.12 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC20 (8.35 (6.98-9.20) mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR (1.37-111 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	7-21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Whole organism)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	7-21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Physiology (Injury-Necrosis, Response Site: Not reported)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Day(s), (21 Day(s))	<i>Allium cepa</i> (Common Onion), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC10 (6.78 (5.16-7.84) mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (12.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (12.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (65.58 (57.29-76.05) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (21.7 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (113.46 (95.95-139.07) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (21.67 (16.89-26.35) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (68.75 (52.15-96.37) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (14.54 (7.75-21.27) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Allium tuberosum</i> (Chinese Chives), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.8 mg/kg dry soil / 21.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (13.50 (10.46-16.53) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (>1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Whole organism)	NR (333-1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (1000 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (1000 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (333-1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Avena sativa</i> (Common Oat), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (1000 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-L-Proline, Response Site: Root)	NOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Morphology-Weight, Response Site: Leaf/needle)	NOEL (50 mg/kg)	Development/Growth	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Chlorophyll A concentration, Response Site: Leaf/needle)	NOEL (50 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Carotene, Response Site: Leaf/needle)	NOEL (50 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Morphology-Weight, Response Site: Leaf/needle)	NOEL (100 mg/kg)	Development/Growth	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (100 mg/kg)	Development/Growth	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Growth-Weight, Response Site: Root)	NOEL (100 mg/kg)	Development/Growth	Low	5120365

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Organic acids, Response Site: Root)	NOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-meso-Erythritol, Response Site: Root)	NOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Carbohydrate, Response Site: Root)	NOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Morphology-Weight, Response Site: Leaf/needle)	LOEL (100 mg/kg)	Development/Growth	Low	5120365

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Chlorophyll B concentration, Response Site: Leaf/needle)	LOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Chlorophyll A concentration, Response Site: Leaf/needle)	LOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Biochemical (Biochemistry-Carotene, Response Site: Leaf/needle)	LOEL (100 mg/kg)	Mechanistic: Biomarkers (exposure and effect); Photosynthesis	Low	5120365
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Not reported	0 mg/kg / 50 mg/kg / 100 mg/kg	Growth (Morphology-Weight, Response Site: Stem)	NOEL (100 mg/kg)	Development/Growth	Low	5120365

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	6 Week(s), (6 Week(s))	<i>Bougainvillea spectabilis</i> (Bougainvillea), Seedling, Not Reported, Not reported (FLOWER MARKET, ZHANGZHOU FUIKIAN PROVINCE)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg / 50 mg/kg / 100 mg/kg	Accumulation (Accumulation-Residue, Response Site: Aboveground portion, Leaf/needle, Root, Stem)	NR (50-100 mg/kg)	ADME (bio-transformation)	Low	5120365
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Whole organism)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (4.12 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC10 (3.55 (0.864-6.59) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (111 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC50 (19.8 (12.7-31.1) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC20 (6.40 (2.35-10.4) mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (12.3 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Brassica napus</i> (Rapeseed), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (111 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (111.36 (90.44-148.94) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (14.34 (10.45-17.96) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (30.08 (23.82-36.02) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (8.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (171.54 (126.19-277.57) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (19.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (13.2 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (95.82 (76.91-130.37) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Brassica rapa</i> var. <i>amplexicaulis</i> (Celery Cabbage), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / 19.8 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (23.34 (18.63-27.69) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (12.3-1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (12.3 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (1000 mg/kg dry soil)	Mortality	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC50 (141 (98.4-206) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (1000 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC20 (16.2 (6.97-27.6) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC10 (5.20 (1.55-10.9) mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Whole organism)	NR (37.0-1000 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil / 1000 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (37.0 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (35.27 (27.60-43.06) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (136.24 (104.15-197.89) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (143.38 (107.60-215.15) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (214.46 (154.51-354.28) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (24.6 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (17.77 (13.26-22.21) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (16.83 (13.33-21.27) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (8.5 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Cucumis sativus</i> (Cucumber), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.5 mg/kg dry soil / 24.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (8.5 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (333 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (333 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (37.0 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (333 mg/kg dry soil)	Mortality	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (0.457-333 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Leaf/needle, Stem, Whole organism)	NR (4.12-333 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (111 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC10 (12.3 (4.41-22.2) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC20 (34.4 (18.2-51.8) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Physiology (Injury-Necrosis, Response Site: Not reported)	NR (4.12-333 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil / 333 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC50 (246 (169-422) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (31.63 (23.62-38.99) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (29.6 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (13.2 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (13.2 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (258.47 (188.16-425.76) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (152.03 (124.70-199.77) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (40.96 (31.87-49.52) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (30.79 (24.22-36.83) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Glycine max</i> (Soybean), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 13.2 mg/kg dry soil / 29.6 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (228.49 (168.29-366.68) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	3 Day(s), (3 Day(s))	<i>Gypsophila elegans</i> (Showy Babysbreath), Seedling, Not Reported, Laboratory (FROM COMMERCIAL HORTICULTURE COMPANY, NELSON GARDEN OY, TURKU, FINLAND)	Filter paper, Environmental, unspecified, 300 Organism	Chemical analysis reported	0 mg/L / 1.25 mg/L / 1.75 mg/L	Growth (Growth-Length, Response Site: Root)	NOEL (1.75 mg/L)	Development/Growth	High	1294252
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (8.8 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (8.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Root)	NOEL (13.2 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (84.33 (70.93-105.94) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (66.01 (56.22-80.86) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (140.79 (107.52-211.24) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (24.07 (18.69-29.03) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (17.46 (13.65-20.98) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Lactuca sativa</i> (Lettuce), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8.8 mg/kg dry soil / 13.2 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (12.04 (8.97-14.93) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	4 Day(s), (4 Day(s))	<i>Portulaca oleracea</i> (Wild Portulaca), Seedling, Not Reported, Laboratory (FROM COMMERCIAL HORTICULTURE COMPANY, OY SCHETELIG AB, VANTAA, FINLAND)	Filter paper, Environmental, unspecified, 282 Organism	Chemical analysis reported	0 mg/L / 0.01 mg/L / 0.10 mg/L / 1.00 mg/L	Growth (Growth-Length, Response Site: Root)	NR (0.01-1.00 mg/L)	Development/Growth	High	1294252
1222-05-5	7-14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Morphology-Abnormal, Response Site: Whole organism)	NR (1.37-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	NOEL (12.3 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NOEL (111 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC20 (17.2 (9.3-24.3) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	LOEL (37.0 mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC50 (46.5 (35.0-63.0) mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Stage, Response Site: Not reported)	NR (0.457-111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Population (Population-Weight, Response Site: Not reported)	EC10 (10.3 (4.3-16.1) mg/kg dry soil)	Development/Growth	High	8784978

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Growth (Development-Emergence, Response Site: Not reported)	NOEL (111 mg/kg dry soil)	Development/Growth	High	8784978
1222-05-5	14 Day(s), (14 Day(s))	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (NR)	Natural soil, Environmental, Soil slurry, Not Reported	Chemical analysis reported	0 mg/kg dry soil / 0 mg/kg dry soil / 0.457 mg/kg dry soil / 1.37 mg/kg dry soil / 4.12 mg/kg dry soil / 12.3 mg/kg dry soil / 37.0 mg/kg dry soil / 111 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (111 mg/kg dry soil)	Mortality	High	8784978
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (24.41 (19.14-29.53) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (6.67 (4.26-9.17) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (134.58 (106.45-185.57) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (48.75 (32.00-92.88) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (77.58 (61.15-106.11) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (5.0 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (5.0 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (8.5 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Solanum lycopersicum</i> (Garden Tomato), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 5.0 mg/kg dry soil / 8.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (4.35 (0.98-8.47) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Filter paper, Environmental, Direct application, Not Reported	Unmeasured	0 mg/L / 50 mg/L / 100 mg/L / 150 mg/L / 200 mg/L / 250 mg/L	Reproduction (Reproduction-Germination, Response Site: Whole organism)	NOEL (250 mg/L)	Reproductive/Teratogenic	High	5427815
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Filter paper, Environmental, Direct application, Not Reported	Unmeasured	0 mg/L / 50 mg/L / 100 mg/L / 150 mg/L / 200 mg/L / 250 mg/L	Growth (Growth-Length, Response Site: Root)	LOEL (50 mg/L)	Development/Growth	High	5427815

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Filter paper, Environmental, Direct application, Not Reported	Unmeasured	0 mg/L / 50 mg/L / 100 mg/L / 150 mg/L / 200 mg/L / 250 mg/L	Growth (Growth-Height, Response Site: Shoot)	LOEL (50 mg/L)	Development/Growth	High	5427815
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Filter paper, Environmental, Direct application, Not Reported	Unmeasured	0 mg/L / 50 mg/L / 100 mg/L / 150 mg/L / 200 mg/L / 250 mg/L	Growth (Growth-Height, Response Site: Root)	EC50 (422.3 mg/L)	Development/Growth	High	5427815
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Filter paper, Environmental, Direct application, Not Reported	Unmeasured	0 mg/L / 50 mg/L / 100 mg/L / 150 mg/L / 200 mg/L / 250 mg/L	Growth (Growth-Height, Response Site: Shoot)	EC50 (143.4 mg/L)	Development/Growth	High	5427815
1222-05-5	7-14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	NR (0.2-3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	NOEL (3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAON-ING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Enzyme(s)-Peroxidase activity, Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle, Root)	NR (0.2-3.0 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAONING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seedling, Not Reported, Laboratory (LIAONING DONGYA SEED CO, SHENYANG, CHINA)	Hydroponic, Environmental, Hydroponic, Not Reported	Unmeasured	0 mg/L / 0.2 mg/L / 0.4 mg/L / 0.7 mg/L / 1.5 mg/L / 3.0 mg/L	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	LOEL (0.2 mg/L)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology); Photosynthesis	High	5427815
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Development/Growth	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Root)	LOEL (65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Catalase, Response Site: Root)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	NOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Root)	LOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Leaf/needle)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Root)	NOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Development/Growth	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	NOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Root)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Leaf/needle)	NOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry- Malondialdehyde, Response Site: Leaf/needle)	NOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	LOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Root)	LOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Leaf/needle)	LOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	NOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	LOEL (65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Leaf/needle)	NOEL (65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	14 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Root)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	LOEL (0.842 mg/kg dry soil)	Development/Growth	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Leaf/needle)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Leaf/needle)	LOEL (7.110 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Leaf/needle)	NOEL (0.842 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Root)	LOEL (65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Root)	NOEL (65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052
1222-05-5	21 Day(s), (21 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, TIANJIN, CN)	Natural soil, Environmental, Direct application, Not Reported	Measured	0.010 mg/kg dry soil / 0.842 mg/kg dry soil / 7.110 mg/kg dry soil / 65.300 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	NR (0.842-65.300 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology)	Medium	4690052

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Growth (Growth-Length, Response Site: Root)	EC10 (55.7 mg/kg)	Development/Growth	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Growth (Growth-Height, Response Site: Shoot)	EC50 (928.5 mg/kg)	Development/Growth	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Mortality (Mortality-Mortality, Response Site: Not reported)	LC10 (84.1 mg/kg)	Mortality	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (846.6 mg/kg)	Mortality	Uninformative	4650262

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Reproduction (Reproduction-Germination, Response Site: Not reported)	LOEL (194 mg/kg)	Reproductive/Teratogenic	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Reproduction (Reproduction-Germination, Response Site: Not reported)	NOEL (77 mg/kg)	Reproductive/Teratogenic	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Growth (Growth-Height, Response Site: Shoot)	EC10 (25.0 mg/kg)	Development/Growth	Uninformative	4650262
1222-05-5	NA Germination, (NA Germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/kg / 39 mg/kg / 77 mg/kg / 194 mg/kg / 387 mg/kg / 775 mg/kg / 1936 mg/kg / 3873 mg/kg	Growth (Growth-Length, Response Site: Root)	EC50 (2123.0 mg/kg)	Development/Growth	Uninformative	4650262

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	NOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	NOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Root)	NOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)- Catalase, Response Site: Leaf/needle)	NOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Leaf/needle)	NOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Root)	LOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	LOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	LOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Leaf/needle)	LOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Root)	NR (1-10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	NOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Biochemistry-Chlorophyll, Response Site: Leaf/needle)	LOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Leaf/needle)	LOEL (10 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	14 Day(s), (14 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (TIANJIN ACADEMY OF AGRICULTURAL SCIENCES, CHINA)	Natural soil, Environmental, Direct application, 10 Seed	Unmeasured	0 mg/kg dry soil / 1 mg/kg dry soil / 10 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Root)	LOEL (1 mg/kg dry soil)	Mechanistic: Oxidative stress (including redox biology); Photosynthesis	Medium	3399556
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Shoot)	NOEC (0.43 mg/kg soil)	Development/Growth	Uninformative	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Root)	NOEC (0.29 mg/kg soil)	Development/Growth	Uninformative	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Root)	EC50 (85 mg/kg soil)	Development/Growth	Uninformative	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Root)	EC50 (132 mg/kg soil)	Development/Growth	Uninformative	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Shoot)	EC50 (126 mg/kg soil)	Development/Growth	Uninformative	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	NOEC (8.31 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	NOEC (2.29 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Growth (Growth-Length, Response Site: Shoot)	EC50 (196 mg/kg soil)	Development/Growth	Uninformative	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Root)	NOEC (1.75 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	EC50 (555 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	EC50 (358 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Reproduction (Reproduction-Germination, Response Site: Not reported)	NOEC (1.49 mg/kg soil)	Reproductive/Teratogenic	Uninformative	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Leaf/needle)	NOEC (1.22 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	NOEC (0.73 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Root)	EC50 (796 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Reproduction (Reproduction-Germination, Response Site: Not reported)	EC50 (679 mg/kg soil)	Reproductive/Teratogenic	Uninformative	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	EC50 (670 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Root)	EC50 (513 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	<=7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Reproduction (Reproduction-Germination, Response Site: Not reported)	EC50 (438 mg/kg soil)	Reproductive/Teratogenic	Uninformative	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	EC50 (3789 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	EC50 (331 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Leaf/needle)	EC50 (2444 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Root)	EC50 (213 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	7 Day(s), (7 Day(s))	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory	Unknown media, Environmental, unspecified, Not Reported	Unmeasured	0 mg/kg soil / 50 mg/kg soil / 100 mg/kg soil / 150 mg/kg soil / 200 mg/kg soil / 250 mg/kg soil / 300 mg/kg soil	Biochemical (Biochemistry-Soluble proteins, Response Site: Leaf/needle)	EC50 (1043 mg/kg soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Medium	3187166
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (39.31 (28.51-49.93) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (85.70 (66.00-105.33) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (339.27 (258.21-494.85) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (582.56 (422.18-944.18) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (15.6 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (15.6 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (316.52 (248.52-438.56) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (33.58 (23.33-43.78) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Triticum aestivum</i> (Bread Wheat), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 15.6 mg/kg dry soil / 42.5 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (42.5 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC50 (306.97 (260.90-377.67) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (290.95 (250.44-350.55) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC50 (422.62 (353.08-538.18) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (58.73 (44.84-71.77) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (19.8 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Vascular plants Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	NOEL (29.7 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	EC10 (56.42 (42.18-69.8) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Height, Response Site: Shoot)	NOEL (19.8 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	21 Days post germination, (21 Days post germination)	<i>Zea mays</i> (Corn), Seed, Not Reported, Laboratory (CHINESE ACADEMY OF AGRICULTURAL SCIENCES, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 19.8 mg/kg dry soil / 29.7 mg/kg dry soil / NR / NR / NR / NR	Growth (Growth-Length, Response Site: Root)	EC10 (93.34 (74.35-110.80) mg/kg dry soil)	Development/Growth	High	5427885

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (24 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 3.0 mg/L / 6.1 mg/L / 12.2 mg/L / 24.3 mg/L / 48.7 mg/L / 97.3 mg/L / 194.6 mg/L	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (>194.6 mg/L)	Mortality	High	5919179
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Growth (Development-Maturity, Response Site: Not reported)	LOEC (9.8 mg/L)	Development/Growth	High	5919179
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Growth (Growth-Length, Response Site: Whole organism)	LOEC (9.8 mg/L)	Development/Growth	High	5919179
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Pregnant, Paris or Gravid, Response Site: Not reported)	LOEC (9.8 mg/L)	Reproductive/Teratogenic	High	5919179
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Growth (Development-Maturity, Response Site: Not reported)	NOEC (4.9 mg/L)	Development/Growth	High	5919179

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Growth (Growth-Length, Response Site: Whole organism)	NOEC (4.9 mg/L)	Development/Growth	High	5919179
1222-05-5	60 Hour(s), (60 Hour(s))	<i>Caenorhabditis elegans</i> (Nematode), Larva, 1 Day(s), Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Pregnant, Paris or Gravid, Response Site: Not reported)	NOEC (4.9 mg/L)	Reproductive/Teratogenic	High	5919179
1222-05-5	3 Day(s), (3 Day(s))	<i>Caenorhabditis elegans</i> (Nematode), Not reported, Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Reproduction, general, Response Site: Not reported)	LOEC (19.5 mg/L)	Reproductive/Teratogenic	High	5919179
1222-05-5	3 Day(s), (3 Day(s))	<i>Caenorhabditis elegans</i> (Nematode), Not reported, Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Fecundity, Response Site: Not reported)	LOEC (19.5 mg/L)	Reproductive/Teratogenic	High	5919179
1222-05-5	3 Day(s), (3 Day(s))	<i>Caenorhabditis elegans</i> (Nematode), Not reported, Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Reproduction, general, Response Site: Not reported)	NOEC (9.8 mg/L)	Reproductive/Teratogenic	High	5919179

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Caenorhabditis elegans</i> (Nematode), Not reported, Not Reported, Laboratory	Culture, Environmental, Growth medium, Not Reported	Unmeasured	0 mg/L / 0.3 mg/L / 0.6 mg/L / 1.2 mg/L / 2.4 mg/L / 4.9 mg/L / 9.8 mg/L / 19.5 mg/L	Reproduction (Reproduction-Fecundity, Response Site: Not reported)	NOEC (9.8 mg/L)	Reproductive/Teratogenic	High	5919179
1222-05-5	7 Day(s), (7 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIANJIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (140.0 ug/g soil)	Mortality	High	5352379
1222-05-5	7 Day(s), (7 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIANJIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (489.0 mg/kg)	Mortality	High	5352379

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (7 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (1054.1 ug/g soil)	Mortality	High	5352379
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (140.0 ug/g soil)	Mortality	High	5352379
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (1054.1 ug/g soil)	Mortality	High	5352379

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 100.0 ug/g soil / 140.0 ug/g soil / 196.0 ug/g soil / 274.4 ug/g soil / 384.2 ug/g soil / 537.8 ug/g soil / 752.9 ug/g soil / 1054.1 ug/g soil / 1475.8 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (392.4 mg/kg)	Mortality	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Growth (Growth-Growth rate, Response Site: Not reported)	NOEL (50 ug/g soil)	Development/Growth	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	NR (3-100 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (100 ug/g soil)	Mortality	High	5352379

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	NOEL (3 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-Calreticulin mRNA, Response Site: Not reported)	NOEL (3 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-Calreticulin mRNA, Response Site: Not reported)	LOEL (10 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-Annetocin mRNA, Response Site: Not reported)	LOEL (10 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Growth (Growth-Growth rate, Response Site: Not reported)	LOEL (100 ug/g soil)	Development/Growth	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	LOEL (50 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Reproduction (Reproduction-Fertile cocoons, Response Site: Not reported)	LOEL (50 ug/g soil)	Reproductive/Teratogenic	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	NOEL (30 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics- Translationally Controlled Tumor Protein mRNA, Response Site: Not reported)	NOEL (100 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics- Annetocin mRNA, Response Site: Not reported)	NOEL (3 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Reproduction (Reproduction- Fertile cocoons, Response Site: Not reported)	NOEL (30 ug/g soil)	Reproductive/Teratogenic	High	5352379
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (EARTHWORM BREEDER COMPANY IN TIAN-JIN, CHINA)	Natural soil, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/g soil / 0 ug/g soil / 3 ug/g soil / 10 ug/g soil / 30 ug/g soil / 50 ug/g soil / 100 ug/g soil	Cellular (Genetics- Superoxide dismutase mRNA, Response Site: Not reported)	LOEL (10 ug/g soil)	Mechanistic: Genotox (including DNA repair)	High	5352379
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry- Malondialdehyde, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	NR (0.3-3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	NR (0.3-3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Not reported	Filter paper, Environmental, unspecified, 5 Organism	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690063

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	12 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	24 Hour(s), (72 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 2.0 ug/cm2 / 3.2 ug/cm2 / 5.1 ug/cm2 / 8.2 ug/cm2 / 13.1 ug/cm2 / 21.0 ug/cm2 / 33.6 ug/cm2 / 53.7 ug/cm2 / 85.9 ug/cm2	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (32.60 (29.74-35.72) ug/cm2)	Mortality	High	4690069
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	24 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	NOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	LOEL (3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	NR (0.3-3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	NOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	36 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	NR (0.3-3.0 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-HSP70 mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Superoxide dismutase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	48 Hour(s), (72 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 2.0 ug/cm2 / 3.2 ug/cm2 / 5.1 ug/cm2 / 8.2 ug/cm2 / 13.1 ug/cm2 / 21.0 ug/cm2 / 33.6 ug/cm2 / 53.7 ug/cm2 / 85.9 ug/cm2	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (11.87 (10.80-13.01) ug/cm2)	Mortality	High	4690069
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Cellular (Genetics-Catalase mRNA, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069
1222-05-5	48 Hour(s), (48 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 0.3 ug/cm2 / 3.0 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (0.3 ug/cm2)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	High	4690069

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	72 Hour(s), (72 Hour(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (PURCHASED FROM EARTHWORM BREEDING COMPANY, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0 ug/cm2 / 2.0 ug/cm2 / 3.2 ug/cm2 / 5.1 ug/cm2 / 8.2 ug/cm2 / 13.1 ug/cm2 / 21.0 ug/cm2 / 33.6 ug/cm2 / 53.7 ug/cm2 / 85.9 ug/cm2	Mortality (Mortality-Mortality, Response Site: Not reported)	LC50 (6.14 (5.47-6.83) ug/cm2)	Mortality	High	4690069
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 8-9 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 10 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 1.0 mg/kg dry soil / 10.0 mg/kg dry soil / 100.0 mg/kg dry soil / 1000.0 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	NR (1.0-100.0 mg/kg dry soil)	Development/Growth	High	7607848
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 8-9 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 10 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 1.0 mg/kg dry soil / 10.0 mg/kg dry soil / 100.0 mg/kg dry soil / 1000.0 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-LETH (1000.0 mg/kg dry soil)	Mortality	High	7607848
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 8-9 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 10 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 1.0 mg/kg dry soil / 10.0 mg/kg dry soil / 100.0 mg/kg dry soil / 1000.0 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (100.0 mg/kg dry soil)	Mortality	High	7607848

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	4 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (250 mg/kg dry soil)	Mortality	High	7607848
1222-05-5	4 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (105 mg/kg dry soil)	Development/Growth	High	7607848
1222-05-5	4 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	LOEL (250 mg/kg dry soil)	Development/Growth	High	7607848
1222-05-5	5 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Behavior (Feeding behavior-Food consumption, Response Site: Not reported)	NOEL (105 mg/kg dry soil)	Behavioral	High	7607848

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	5 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Behavior (Feeding behavior-Food consumption, Response Site: Not reported)	LOEL (250 mg/kg dry soil)	Behavioral	High	7607848
1222-05-5	8 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEL (45 mg/kg dry soil)	Reproductive/Teratogenic	High	7607848
1222-05-5	8 Week(s), (8 Week(s))	<i>Eisenia fetida</i> (Earthworm), Adult, 9-10 Month(s), Not Reported, Not reported	Artificial soil, Environmental, Present in soil, 40 Organism	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 8 mg/kg dry soil / 19 mg/kg dry soil / 45 mg/kg dry soil / 105 mg/kg dry soil / 250 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEL (105 mg/kg dry soil)	Reproductive/Teratogenic	High	7607848
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Catalase, Response Site: Not reported)	LOEL (3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Catalase, Response Site: Not reported)	NOEL (1.57 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NOEL (0.157 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	1 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	LOEL (1.57 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)- Catalase, Response Site: Not reported)	NOEL (0.157 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)- Catalase, Response Site: Not reported)	LOEL (1.57 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	LOEL (1.57 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 3.14 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (1.57 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (0.157 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	2 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NOEL (0.157 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 3.14 ug/cm2	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	3 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Catalase, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	3 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	3 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 0.157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Mortality (Mortality-Mortality, Response Site: Not reported)	NR-ZERO (3.14 ug/cm2)	Mortality	High	3406502

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (3 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM BREEDING FARM, TIANJIN, CHINA)	Filter paper, Environmental, unspecified, Not Reported	Unmeasured	0 ug/cm2 / 0.00157 ug/cm2 / 0.0157 ug/cm2 / 1.57 ug/cm2 / 3.14 ug/cm2	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NR (0.00157-3.14 ug/cm2)	Mechanistic: Oxidative stress (including redox biology)	High	3406502
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry- Malondialdehyde, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry- Malondialdehyde, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Catalase, Response Site: Not reported)	NOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	3 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Catalase, Response Site: Not reported)	LOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Peroxidase activity, Response Site: Not reported)	LOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Catalase, Response Site: Not reported)	NOEL (10 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry- Malondialdehyde, Response Site: Not reported)	NOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)- Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	7 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NOEL (10 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	LOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (10 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NOEL (10 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Not reported)	NR (10-100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	NOEL (50 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Peroxidase activity, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Biochemistry-Malondialdehyde, Response Site: Not reported)	LOEL (100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Superoxide dismutase (SOD) enzyme activity, Response Site: Not reported)	LOEL (10 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	28 Day(s), (28 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (LUTAI EARTHWORM-BREEDING FARM (TIANJIN, CHINA))	Natural soil, Environmental, Direct application, 10 Adult	Unmeasured	0 mg/kg dry soil / 10 mg/kg dry soil / 50 mg/kg dry soil / 100 mg/kg dry soil	Biochemical (Enzyme(s)-Catalase, Response Site: Not reported)	NR (10-100 mg/kg dry soil)	Mechanistic: Biomarkers (exposure and effect); Oxidative stress (including redox biology)	Low	5918304
1222-05-5	14 Day(s), (14 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 60.0 mg/kg dry soil / 90.0 mg/kg dry soil / 135.0 mg/kg dry soil / 202.5 mg/kg dry soil / 303.8 mg/kg dry soil / 455.6 mg/kg dry soil	Mortality (Mortality-Survival, Response Site: Not reported)	LC50 (188.36 (167.76-210.81) mg/kg dry soil)	Mortality	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEL (6.0 mg/kg dry soil)	Reproductive/Teratogenic	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC50 (16.69 (15.36-18.13) mg/kg dry soil)	Reproductive/Teratogenic	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	NOEL (9.0 mg/kg dry soil)	Reproductive/Teratogenic	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC10 (9.24 (8.00-10.37) mg/kg dry soil)	Reproductive/Teratogenic	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC10 (6.84 (5.79-7.82) mg/kg dry soil)	Reproductive/Teratogenic	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEL (13.5 mg/kg dry soil)	Reproductive/Teratogenic	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Worms Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Mortality (Mortality-Survival, Response Site: Not reported)	NOEL (45.6 mg/kg dry soil)	Mortality	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	EC50 (20.95 (19.38-22.73) mg/kg dry soil)	Reproductive/Teratogenic	High	5427885
1222-05-5	56 Day(s), (56 Day(s))	<i>Eisenia fetida</i> (Earthworm), Adult, Not Reported, Laboratory (CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 6.0 mg/kg dry soil / 9.0 mg/kg dry soil / 13.5 mg/kg dry soil / 20.3 mg/kg dry soil / 30.4 mg/kg dry soil / 45.6 mg/kg dry soil	Reproduction (Reproduction-Progeny counts/numbers, Response Site: Not reported)	LOEL (9.0 mg/kg dry soil)	Reproductive/Teratogenic	High	5427885

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Terrestrial: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Diameter, Response Site: Shell)	EC10 (16.63 (12.26-21.07) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	EC10 (22.07 (16.52-27.63) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Diameter, Response Site: Shell)	EC50 (101.09 (87.02-119.37) mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	EC50 (135.23 (114.94-163.59) mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Diameter, Response Site: Shell)	LOEL (20.4 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	LOEL (20.4 mg/kg dry soil)	Development/Growth	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Mollusks Extraction Table

CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Diameter, Response Site: Shell)	NOEL (12.0 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Growth (Growth-Weight, Response Site: Whole organism)	NOEL (12.0 mg/kg dry soil)	Development/Growth	High	5427885
1222-05-5	28 Day(s), (28 Day(s))	<i>Achatina fulica</i> (Giant African Snail), Juvenile, Not Reported, Laboratory (SNAIL CULTURING FARM, BEIJING, CHINA)	Natural soil, Environmental, Soil slurry, Not Reported	Unmeasured	0 mg/kg dry soil / 0 mg/kg dry soil / 12.0 mg/kg dry soil / 20.4 mg/kg dry soil / 34.6 mg/kg dry soil / 58.8 mg/kg dry soil / 100.0 mg/kg dry soil / 179.0 mg/kg dry soil / 289.0 mg/kg dry soil	Mortality (Mortality-Survival, Response Site: Not reported)	NOEL (289.0 mg/kg dry soil)	Mortality	High	5427885

Continued on next page ...

...continued from previous page

Terrestrial: Mollusks Extraction Table										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Source	Exposure Media, Route Grouping, Type, Sample Number	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Health Effect as reported by the Study Author(s)	Effect Level as reported by the Study Author(s)*	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID

* If multiple extractions contained all identical information except the effect level, extraction rows were collapsed and the differing levels are listed by comma in this row.

Data Extraction of Rodent Data for the Application of Environmental Hazard										
CASRN	Exposure and Overall Duration	Test Organism Species, Age, Sex, Strain	Exposure Type	Test Analysis Exposure Parameters	Dose/ Concentration for Each Main Group of the Study	Hazard Effect/ Hazard Level	Effect Level as reported by the Study Author(s)	Health Outcome Identified by the Assessor	Overall Quality Determination	HERO ID
1222-05-5	14-day, (71-day)	Rat(Rattus norvegicus), Sampling Age: Adult Exposure Age: Adult, Male and Female, Wistar	Dietary	Measured	0/38/134 mg/kg/d	38/134 mg/kg/day	NOAEL/LOAEL	Decrease in F1 offspring body weight	High	8785662
1222-05-5	13-weeks, (13-weeks)	Rat(Rattus norvegicus), Sampling Age: Adult Exposure Age: Adult, Female, Sprague-Dawley	Gavage	Measured	0/50/150 mg/kg/day	50/150 mg/kg/day	NOAEL/LOAEL	Reduced weight gain	High	4955361

HHCB

Human Health Hazard Animal Toxicology Extraction

Acute (less than or equal to 24 hr)

HHCB - Acute (less than or equal to 24 hr)					
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD* Citation and HERO ID
ICH Harmonised Tripartite Guideline stages C and D of the reproductive process (USFDA, ICH, 1994).All procedures complied with GLPs Practices as define by the FDA (USFDA, GLP, Final Rule, 1987), the Japanese Ministry of Health and Welfare (Japanese MHW, 1988) and the European Economic Community (EEC, 1989) Rat; Sprague-Dawley - [rat]; Female	Oral: Gavage Treatment on GDs 7-17	POD: 50 mg/kg = NOAEL maternal tox; 150 mg/kg = NOAEL dev tox. 0, 50, 150, 500 mg/kg-bw/day			Reproductive/Developmental: High Christian et al, 1999 4955361

Continued on next page ...

...continued from previous page

HHCB - Acute (less than or equal to 24 hr)					
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD* Citation and HERO ID
Study was GLP compliant. The protocol was based on methods defined in OECD Guidelines 402 and test method B.3 of the Council Regulation No 440/2008. Rat; Sprague-Dawley - [rat]; Both	Dermal 24 hours Test substance was applied to the skin and covered with gauze dressing for 24 hours.	POD: LD50 >2000 mg/kg 2000mg/kg	In an acute dermal toxicity study, Sprague Dawley rats (5/sex) had a single dose of 2000 mg/kg of undiluted Galaxolide (tradename for 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8,-hexamethylcyclopenta[g]benzopyran or HHCB) applied to the shaved dorsal area of the trunk. Non-occlusive porous gauze dressing was used to cover the test substance. After 24 hours, the gauze dressing was removed, and the treated area was rinsed with distilled water. Animals were observed for 14 days for mortality and clinical signs. Body weights were assessed on day 0, 2, 7, and 14. On day 14, animals were sacrificed. Organs were assessed macroscopically. No animals died during the study. No systemic clinical signs of toxicity were observed. Slight erythema was observed in all females from days 2 to 5 at the treatment site. Body weight gain was reported to remain normal throughout the study; however a concurrent control group was not included to compare to. From day 0-2 female rats lost weight (0.8%), but then gained weight for the remainder of the study. Body weight data for a historical control was shown, however SD were not provided to determine if significant differences occurred. No treatment-related microscopic changes were observed. The LD50 was determined to be greater than 2000 mg/kg by dermal route.		Mortality, Nutritional/Metabolic, Skin/Connective Tissue, clinical signs: High International Flavors & Fragrances 2016 8785033
Rabbit; Albino; Unknown	Dermal	POD: The test material is a moderate irritant 25, 50, 100% in diethyl phthalate	It seems HHCB causes moderate irritation to the skin of rabbits.	No adequate description of test substance. No mention of animal information (sex, source, age, husbandry conditions).	Irritation: Medium IFF 1973 8785040
Continued on next page ...					

...continued from previous page

HHCB - Acute (less than or equal to 24 hr)						
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
The test substance was evaluated for skin irritancy using the method of Draize as described in "Appraisal of the Safety of Chemicals in Food, Drugs and Cosmetics" published by the Association of Food and Drug Officials of the U.S. Rabbit; Not specified; Unknown	Dermal 24 hours 0.5 mL of test substance (17.5% galaxolide + 7.5% DPE + 75% alcohol SDA 39c) was applied to a 2x2 area (units not specified) of clipped skin (abraded and intact skin tested), covered with webril patches and sealed with blendern surgical tape. Animals were immobilized in racks for a 24-hour exposure period.	POD: NA 0.5mL	Three albino rabbits were used. Approximately 10% of total body area was clipped free of hair. On the posterior of the clipped area several minor abrasions were made to penetrate the stratum corneum, but not the derma. 0.5mL of test substance (17.5% galaxolide + 7.5% DPE + 75% alcohol SDA 39c) was applied to a 2x2 area (units not specified) of skin (abraded and intact skin tested). The area was then covered with webril patches and sealed with blendern surgical tape. Animals were immobilized in racks for a 24-hour exposure period. At the end of the 24-hour period and again 48-hours later, skin was evaluated according to the method of Draize. No evidence of irritation was observed.	Only 1 concentration of galaxolide was tested	Irritation: Medium	IFF 1975 8785084
Pre-guideline study (OECD 405); Compliance methods did not report this information Rabbit; Not specified; Unknown	ocular (eye drops) 0.1 mL of Galaxolide 50 was instilled into the right eye of 3 rabbits. The approximate final test concentration was 35% galaxolide, 15% DEP and 50% denatured alcohol.	POD: 0 %/mL	0.1 mL of Galaxolide 50 was instilled into the right eye of 3 rabbits. The left eye of each animal served as its own control The approximate final test concentration was 35% galaxolide, 15% DEP and 50% denatured alcohol. Both the treatment and control eye were examined every 24-hrs for four days and then again on day seven. Scorings were based on the Draize scale for scoring ocular lesions. Study authors concluded that the test material produced mild conjunctival irritation that cleared on the seventh day in one animal with corneal involvement in the same animal. Note: There was some conflicting information related to the percentage of Galaxolide used in the experiment. Both 35% and 50% were reported in the study report.	Animal body weights were not provided	Ocular/Sensory: Medium	IFF 1973 8785111
Draize eye irritation test Rabbit; Albino; Unknown	Eye	0, 3.75, 25, 50, 100 % (in water or food)	HHCB diluted with Alcohol SDA 39C (3.75% HHCB + 96.25 Alcohol SDA 39C) induced slight irritation, and this was cleared by day 7. However, 100% HHCB did not induce any irritation in corneas or irises.		Ocular/Sensory, Irritation: Medium	TSCA Submission 8785657

* Overall Quality Determination

HHCB - Short-term (>1-30 days)						
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
OECD Guidelines for the Testing of Chemicals No. 408, adopted 12 May 1981 and the US EPA (TSCA), Federal Register, Vol. 50, No. 188, 27 September 1985. Rat; CrI:CD(SD)BR; Both	Oral: Diet 2 weeks Mean achieved intakes of HHCB were 347, 615, or 829 mg/kg/day.	POD: 300 mg/kg/day (LOAEL, increased liver weight) 0, 300, 600, 1000 mg/kg-bw/day	Treatment-related increases in absolute liver weight (statistically significant for females at 300 mg/kg/day). Decreased absolute body weight starting at 600 mg/kg/day for males and 1000 mg/kg/day for females.	Did not conduct histopathological analyses of thyroid.	Hepatic/Liver: Medium	Api and Ford 1999 5427830
Rat; CrI:CD(BR); Female	Oral: Gavage 13 days	POD: 150 mg/kg/day (NOAEL, decreased fetal weight and malformations) 0, 50, 150, 500 mg/kg-bw/day	No treatment-related abortions or premature deliveries. There were 25, 24, 24 and 21 pregnant dams Caesarean-sectioned on GD 20 in the O (Vehicle), 50, 150 and 500 mg/kg/day dosage groups, respectively. The 500 mg/kg/day dosage group had significantly reduced (p~0.01) fetal body weights, as compared with the control group values. No other Caesarean-sectioning and litter parameters were affected by dosages of the test article as high as 500 mg/kg/day. Malformations (incidences of axial skeleton (vertebral/rib) malformations) occurred in one, zero, two and six (ps0.01) fetuses from one, zero, two and five (p~0.01) litters in the four respective dosage groups. The finding was considered to be adverse at 500 mg/kg/day.		Reproductive/Developmental: Low	1997 5431330
Rat; CrI:CD(BR); Female	Oral: Gavage 13 days	POD: 50 mg/kg/day (NOAEL, maternal toxicity) 0, 50, 150, 500 mg/kg-bw/day	Maternal body weight gains were reduced and significantly reduced in the 150 and 500 mg/kg/day dosage groups, respectively. Significant reductions in maternal body weights were generally evident in the 500 mg/kg/day dosage group on GDs B through 20. Feed consumption was also reduced for the 150 and 500 mg/kg/day animals. The 500 mg/kg/day dosage group had four to nine rats with excess salivation, urine-stained abdominal fur, red or brown substance on the forepaws and alopecia.		Neurological/Behavioral, Mortality, Nutritional/Metabolic: Low	1997 5431330
No Guidelines specified Rabbit; Albino; Unknown	Ocular 4 days Exposure for 4 days and examined on 4th and 7th day	POD: 0.1 ml of HHCB; No POD or NOAEL stated. 0.1ml		No information on dosage level, sex of animals, what is defined as "normal" or healthy.	Irritation: Medium	IFF 1975 8785656

Continued on next page ...

...continued from previous page

HHCB - Short-term (>1-30 days)						
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
Adherence to a guideline was not specified. Rat; Sprague-Dawley - [rat]; Male	Intraperitoneal injection 7 days/week 30 days	POD: 20 mg/kg/day (LOAEL, reproductive) 0, 20 mg/kg-bw/day	See footnotes for full summary ¹	There is no information reported on the use of plasticizers or polycarbonate cages, and this is likely to have a substantial impact on the reproductive outcomes assessed. The study did not report if the target concentration was confirmed with analytical measurements.	Reproductive/Developmental: High	Li and Wang 2023 12338848

* Overall Quality Determination

¹ 12338848: In a short-term repeated-dose toxicity study, male Sprague Dawley rats (10/group) were administered Galaxolide (HHCB; purity >75%) at 0 or 20 mg/kg-bw/day by intraperitoneal injection daily for 30 days. Body weights were reported at the start of the study, and body weight gain was reported at study termination. Blood was collected at the end of the study for reproductive hormone levels. GnRH, FSH, LH, and testosterone levels were measured in serum of all male rats. Sperm parameters, including concentration, morphology and motility were measured. Oxidative stress was evaluated in serum and testes. Other endpoints evaluated included transcriptomics and gene expression, select organ weights (testes, seminal vesicles, prostate, kidney, and liver) and histopathology (testes and seminal vesicles [5 animals/group]). No significant changes in body weight gain were observed. Compared to controls, serum testosterone levels were significantly decreased, while serum GnRH, FSH, and LH levels were significantly increased. Significant decreases in sperm concentration (74%) and the percentage of motile sperm (15%) were seen compared with control. Sperm abnormality rate nearly doubled. Relative and absolute testes weight were not affected by HHCB exposure. Relative, but not absolute, seminal vesicle weight was significantly increased (~30%) in exposed animals compared with control. Relative prostate, kidney and liver weights were not affected by HHCB exposure. No lesions were observed in the testes or seminal vesicles of control rats. In HHCB treated rats, the convoluted seminiferous tubules were loosely packed, the intertubular gap was increased, and large vacuoles appeared in some convoluted seminiferous tubules. Immature sperm cells were observed in the lumen of some seminiferous tubules. There was no significant change in the diameter of the seminiferous tubules. The height of the epithelium of the seminal vesicles, but not the seminiferous tubules, was significantly decreased. The thickness of smooth muscle in the seminal vesicles was significantly increased. In both serum and testes, MDA levels significantly increased, and SOD levels significantly decreased compared to controls, indicating oxidative stress. Transcriptomic changes were observed in HHCB exposed rats, including altered gene expression in cholesterol biosynthesis, steroid hormone biosynthesis and GnRH signaling pathways. Based on the data provided, a LOAEL of 20 mg/kg/day was determined for this review based on altered male serum hormones, sperm effects, increased relative seminal vesicle weight and histopathological changes in the seminiferous tubules.

HHCB - Subchronic (>30-91 days)						
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
OECD Guidelines for the Testing of Chemicals No. 408, adopted 12 May 1981 and the US EPA (TSCA), Federal Register, Vol. 50, No. 188, 27 September 1985. Rat; CrI:CD(SD)BR; Both	Oral: Diet 13 weeks Mean achieved intakes of HHCB over the 90-day period were 5.4, 15.7, 51.8 and 155.8 mg/kg/day for males and 5.1, 15.6, 51.9 and 154.6 mg/kg/day for females.	POD: 5 mg/kg/day (NOAEL, alterations in glucose and triglycerides) 0, 5, 15, 50, 150 mg/kg-bw/day	Treatment-related decreases in glucose in males and females and triglycerides in males.		Nutritional/Metabolic: Medium	Api and Ford 1999 5427830
Study did not report guidelines or GLP compliance. Rat; Crj: CD(SD) - [rat]; Both	Dermal 13 weeks The test substance was applied daily for up to 13 weeks	POD: 200 mg/kg/day (NOAEL, no clearly adverse effects) 0, 0, 50, 100, 200 mg/kg-bw/day	See footnotes for full summary ¹	The volume of test substance applied to the skin varied between dose groups. The study did not report whether measures were taken to prevent the possibility of oral exposure.	Hepatic/Liver, Renal/Kidney: High	IFF (date redacted) 8785658

* Overall Quality Determination

¹ 8785658: In a dermal toxicity study, Charles River CD rats (15 males/group and 35 females/ low and mid-dose groups and 38 females in the high dose group) had 0 (vehicle), 50, 100 or 200 mg/kg/day (nominal) of Galaxolide (tradename for 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8,-hexamethyl-cyclopenta[g]benzopyran or HHCB) in 95% ethanol applied by syringe or gentle inunction to their clipped backs daily for up to 26 weeks. An untreated control group was also included. Interim sacrifices were conducted at weeks 6 (8 females/control and high dose groups, and 5 females/low and mid-dose groups) and 13 weeks (5 males and 10 females/group). Additionally, after 13 weeks, dosing was stopped for a subset of animals (5 males and 10 females) to assess reversibility. Interim sacrifice animals are evaluated here. Chronically exposed animals and recovery animals are evaluated separately (other form). Rats were observed twice a day for mortality and signs of overt toxicity. Detailed pharmacological evaluation was conducted one week prior to dosing and twice a week during the first 6 weeks, then once a week thereafter (e.g. startle response, limb rotation, righting reflex, locomotor activity, tremors, alley progression, ataxia, and grip strength). Body weights (days 0, 1, 3, 7 and then weekly thereafter) and food intake (weekly) were assessed. Blood (collected by orbital sinus technique) and urine were collected at week 6, 12 and 25 for hematology (RBC, WBC, differential WBC, hematocrit and hemoglobin), clinical chemistry (BUN, glucose, SGPT, SGOT, and SAP levels) and urinalysis (color, pH, specific gravity, glucose, ketones and blood). Other endpoints evaluated included gross necropsy, organ weight (heart, kidneys, liver, brain, ovaries, uterus, testes) and histopathology (adrenals, eyes, large intestine, mesenteric lymph nodes, pancreas, pituitary, urinary bladder, lungs, salivary gland, skin, small intestine, spleen, stomach, thyroid, trachea, esophagus, and any tissue with gross lesion). No unscheduled deaths occurred in the treated groups. One untreated male died in week 11. Crusty white or brown material and scabbed areas were observed on the dorsal area of "a few" rats in the 100 and 200 mg/kg-day groups. There were no significant differences in detailed pharmacological evaluation results compared to controls. No significant changes in body weights or food consumption were observed during the first 13 weeks of the study. Hematological endpoints were comparable across groups. No serum chemistry changes were observed at 6 weeks. At 12 weeks, serum SPGT and SGOT were significantly increased in high-dose males and females, respectively, when compared with vehicle controls. When compared to untreated controls SGOT in males and SPGT in females were significantly increased. No significant organ weight changes were observed in animals sacrificed after 6 weeks. At 13 weeks, relative male liver weights were significantly increased (11% - 15%) at ≥100 mg/kg-day, and relative kidney weights were significantly increased (27%) at 200 mg/kg-day, when compared with untreated controls. When compared to vehicle controls, biologically, but not statistically significant, changes included a 20% increase in relative kidney weights of high-dose males. No biologically or statistically significant absolute organ weight changes were observed, and there were no treatment-related effects on organ weights in females. No gross or histopathological changes were observed. Due to the lack of supporting evidence and statistically significant apical changes, when compared to vehicle controls, a NOAEL of 200 mg/kg-day was identified for rats dermally exposed for up to 13 weeks. A LOAEL was not identified.

HHCB - Chronic (>91 days)						
Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
Study did not report guidelines or GLP compliance. Rat; Crj: CD(SD) - [rat]; Both	Dermal 7 days/week 26 weeks Test substance was applied daily for 26 weeks.	POD: 50 mg/kg/day (NOAEL, increased relative liver weight in females) 0, 0, 50, 100, 200 mg/kg-bw/day	See footnotes for full summary ¹	The volume of test substance applied to the skin varied between dose groups; details of application (e.g., occlusion to prevent the possibility of oral exposure) were not provided. The test concentration was not analytically verified.	Hepatic/Liver, Nutritional/Metabolic, Renal/Kidney: High	IFF (date redacted) 8785658

* Overall Quality Determination

¹ 8785658: In a dermal toxicity study, Charles River CD rats (15 males/group and 35 females/ low and mid-dose groups and 38 females in the high dose group) had 0 (vehicle), 50, 100 or 200 mg/kg/day (nominal) of Galaxolide (tradename for 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8,-hexamethyl-cyclopenta[g]benzopyran or HHCB) in 95% ethanol applied by gentle inunction to their clipped backs daily for up to 26 weeks. An untreated control group was also included. Interim sacrifices were conducted at weeks 6 (8 females/control and high dose groups, and 5 females/low and mid-dose groups) and 13 (5 males and 10 females/group). Interim sacrifice animals were evaluated separately (other form). Additionally, after 13 weeks, dosing was stopped for a subset of animals (5 males and 10 females) to assess reversibility. Rats were observed twice a day for mortality and signs of overt toxicity. Detailed pharmacological evaluation was conducted one week prior to dosing and twice a week during the first 6 weeks, then once a week thereafter (e.g. startle response, limb rotation, righting reflex, locomotor activity, tremors, alley progression, ataxia, and grip strength). Body weights (days 0, 1, 3, 7 and then weekly thereafter) and food intake (weekly) were assessed. Blood (collected by orbital sinus technique) and urine were collected at week 6, 12 and 25 for hematology (RBC, WBC, differential WBC, hematocrit and hemoglobin), clinical chemistry (BUN, glucose, SGPT, SGOT, and SAP levels) and urinalysis (color, pH, specific gravity, glucose, ketones and blood). Other endpoints evaluated included gross necropsy, organ weight (heart, kidneys, liver, brain, ovaries, uterus, testes) and histopathology (adrenals, eyes, large intestine, mesenteric lymph nodes, pancreas, pituitary, urinary bladder, lungs, salivary gland, skin, small intestine, spleen, stomach, thyroid, trachea, esophagus, and any tissue with gross lesion). No unscheduled deaths occurred in the treated groups. One untreated male died in week 11. Crusty white or brown material and scabbed areas were observed on the dorsal area of "a few" rats in the 100 and 200 mg/kg-day groups. There were no significant differences in detailed pharmacological evaluation results compared to controls. No statistically significant changes in body weight were observed; however, the mean body weights of high-dose males were decreased by 10%, relative to untreated controls. Body weight gain was also reduced, but the change did not reach statistical significance. No differences in female body weights were observed. Food consumption was slightly but significantly increased in males and females of all treatment groups, compared with controls, during weeks 14-26. The increase was still present in most groups in animals that stopped treatment after 13 weeks. Food consumption was comparable to controls during weeks 1-13, and food efficacy was not altered. Hematological parameters were in the normal range at the 6-week and 26-week sacrifices. At 13 weeks, compared to vehicle controls SPGT in males and SGOT in females were significantly increased at 200 mg/kg-day. SGOT in males and SPGT in females were also increased, but only compared with the untreated controls. Urinalysis showed decreased urine pH and increased specific gravity in 200 mg/kg-day males at the terminal sacrifice. Specific gravity was increased in females of the same group at both 12 and 26 weeks. Treatment-related organ weight changes included significantly increased absolute (37%) and relative (50%) kidney weights of high-dose male rats at the 26-week sacrifice. Relative, but not absolute, kidney weights were biologically increased (15%) in high-dose females as well. Female relative liver weights were statistically significantly increased in the 100 mg/kg-day group (11%) and the 200 mg/kg-day group (23%). Absolute liver weights in females were biologically, but not statistically, increased (14%) at 200 mg/kg-day. These changes occurred with no supporting gross or histopathological findings. The study authors generally stated that the test substance was non-toxic at all dose levels. However, based on the data, a NOAEL of 50 mg/kg/day and a LOAEC of 100 mg/kg-day were determined based on significant increases in relative liver weights in female rats in the absence of associated changes.

HHCB - Reproductive/Developmental

Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
Simplified OECD 421 Rat; Wistar - [rat]; Both	Oral: Diet 71 days 14 days prior to mating (males and females) 14 days Mating (males and females) 29th day Necroscopy for males 20 days Gestation (females) 23 days Lactation (Females) 72nd day Necroscopy for females	POD: 34 mg/kg/day for developmental (lower mean pup body weight) 34, 121, 38, 134 mg/kg-bw/day F0- pre-mating, F0- mating, F0 - gestation, F0- lactation	The study was designed to identify the dosage for Extended One Generation Toxicity Test (EOGRT)	Only two doses were used for were different for males and females	Thyroid, Reproductive/Developmental, Hepatic/Liver, Renal/Kidney, Pup body weight: High	IFF, 2020 8785662
Authors report compliance with GLP, OECD 414, EPA OPPTS 870.3700, and EC Commission Regulation 440/2008 Rabbit; New Zealand White - [rabbit]; Female	Oral: Gavage 23 days Pregnant rabbits were exposed via gavage on gestational days 6- 28	POD: 30 mg/kg/day (NOAEL, maternal toxicity) 0, 10, 30, 100 mg/kg-bw/day F0 - gestation, GD 6-28	This developmental toxicity study in rabbits evaluated maternal body weight gain and food consumption, implantation sites, fetal body weights, and malformations. The authors report vehicle-related maternal toxicity in all groups, but reductions in body weight gain and food consumption were more pronounced in the high dose group. The study authors therefore identify 30 mg/kg/day as the NOAEL for maternal toxicity. The study authors report no treatment related effects on offspring in any dose group and therefore identify 100 mg/kg/day as the NOAEL for prenatal effects.	Reduced maternal body weight gain and food consumption and reduced fetal body weights in all groups relative to historical controls suggest potential confounding. The authors attribute maternal toxicity observed in all groups to vehicle-related effects.	Reproductive/Developmental, Nutritional/Metabolic: Uninformative	nan 8785663

Continued on next page ...

...continued from previous page

HHCB - Reproductive/Developmental

Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
The study was conducted in general compliance with OECD guidelines 443 and OPPTS 870.3550. The study was GLP compliant. Rat; Wistar - [rat]; Both	Oral: Diet 24 hours/day 7 days/week F0: exposed to 0, 340, 600, or 1200 ppm in diet 10 weeks prior to mating, during mating, gestation, and lactation. F1 pups were split into 3 cohorts: cohort 1a was exposed until sacrifice on PND 85-93; cohort 1b was exposed for 10 weeks prior to mating, during mating, gestation, and lactation; cohort 1c was exposed until sacrifice (after sexual maturation). Calculated doses for F0 males: 0, 25.8, 45.9, 94.1 mg/kg/day; F0 females: pre-mating: 0, 29.0, 50.6, 99.8 mg/kg/day; Gestation: 0, 26.8, 45.6, 91.7 mg/kg/day; Lactation: 0, 34.4, 57.5, 116.3 mg/kg/day Calculated doses for F1 males: 0, 33.9, 59.6, and 123.2 mg/kg/day; F1 females: pre-mating: 0, 35.0, 60.0, 122.1 mg/kg/day; Gestation: 0, 27.4, 47.6, 95.2 mg/kg/day; Lactation: 0, 34.4, 59.9, 121.0 mg/kg/day The doses reported above are the lowest calculated doses provided.	POD: 26.8 mg/kg/day (LOAEL, increased relative thyroid weight in F0 females) 0, 26.8, 45.6, 91.7 mg/kg-bw/day F0- pre-mating, 10 weeks, F0- mating, 2 weeks, F0 - gestation, 3 weeks, F0- lactation, 3 weeks, F1- pre-mating, 10 weeks, F1- mating, 2 weeks, F1 - gestation, 3 weeks, F1- lactation, 3 weeks	See footnotes for full summary ¹	The reported doses in mg/kg-day do not appear to use in-use animal body weight or food consumption data. Stability issues were identified, and the authors did not adjust the frequency of food preparation to address the issue.	Thyroid, Reproductive/Developmental, Hepatic/Liver, Nutritional/Metabolic: High	IFF 2021 8785683

Continued on next page ...

... continued from previous page

HHCB - Reproductive/Developmental

Guideline and Animal Species, Strain, Sex	Exposure Route and Exposure Duration	Study-wide POD and Dose/Concentration(s)	Summary	Major Limitations	Principal Target Organs/Systems and OQD*	Citation and HERO ID
---	--------------------------------------	--	---------	-------------------	--	----------------------

* Overall Quality Determination

¹ 8785683: In an extended one-generation reproductive toxicity study, Wistar rats (25/sex/group) were provided diets containing 0, 470, 825, 1650 ppm (nominal) of Galaxolide (purity not reported), tradename for 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethyl-cyclopenta[g]benzopyran or HHCB, for 10 weeks prior to mating, during mating, until proof of successful mating (males), or during mating, gestation, to lactation day 21 -23 (females). Animals were mated on a 1:1 basis, and females continued exposure during gestation and lactation. After weaning, F1 pups were split into 3 cohorts (20/sex/group): cohort 1a continued exposure until sacrifice on PND 85-93; cohort 1b was exposed for 10 weeks prior to mating, during mating, gestation, and lactation; and cohort 1c was exposed until sacrifice (after sexual maturation). Another group of pups (10/sex/group) were sacrificed on PND21 for thyroid hormone analysis and organ weights. The concentrations of test substance in the diet was adjusted during lactation as follows: 340, 600, and 1200 ppm for LD1-7; 255, 450, and 900 ppm for LD8-14; and 205, 365, and 730 ppm for LD15 to LD21-23 for F0 and F1 females. The study authors calculated daily doses. Calculated doses for F0 males: 0, 25.8, 45.9, 94.1 mg/kg/day; F0 females: pre-mating: 0, 29.0, 50.6, 99.8 mg/kg/day; Gestation: 0, 26.8, 45.6, 91.7 mg/kg/day; Lactation: 0, 34.4, 57.5, 116.3 mg/kg/day. Calculated doses for F1 males: 0, 33.9, 59.6, and 123.2 mg/kg/day; F1 females: pre-mating: 0, 35.0, 60.0, 122.1 mg/kg/day; Gestation: 0, 27.4, 47.6, 95.2 mg/kg/day; Lactation: 0, 34.4, 59.9, 121.0 mg/kg/day. F0 males were sacrificed after successful mating (minimum of 18 weeks of exposure), F0 females were sacrificed on LD22-24, or females that did not deliver or those that failed to mate were sacrificed approximately 26 days after mating (minimum of 17 weeks of exposure). Endpoints evaluated for F0 animals included mortality (twice a day), clinical signs (daily), body weight (males: weekly; females: weekly on GD0, 4, 7, 11, 14, 17, and 20, and LD1, 4, 7, 10, 14, 17, and 21), food intake (males: twice a week; females: twice a week pre-mating and on GD0 to 4, 4-7, 7-11, 11-14, 14-17, 17-20 and LD1-4, 4-7, 7-10, 10-14, 14-17, and 17-21), hematology, thyroid levels, coagulation, clinical chemistry, estrous cycle, urinalysis, mating performance, fertility, delivery and litter data, sperm analysis (motility and morphology), and number of implantation sites and corpora lutea. Gross necropsy was performed. Organ weights were recorded (adrenal glands, brain, cervix, epididymides, heart, kidneys, liver, ovaries, oviducts, pancreas, pituitary gland, prostate, seminal vesicles with coagulating gland, spleen, testes, thymus, thyroid glands, and uterus), and histology examination was done on a complete panel of 38 organs and tissues. F1 pups were evaluated for mortality and clinical signs (daily), body weights (PND1, 4, 7, 14, and 21), sex (PND1 and 4), anogenital distance (PND1), and areola/nipple retention (PND13). Litters were culled to 8 pups/litter (PND 4), 4/sex when possible. Thyroid hormone levels (T4) were measured in sacrificed pups on PND4 (after culling). Cohort 1a: sacrificed PND 85-93. Cohort 1A remained on their respective diets until the time of sacrifice (PND 85-93). Endpoints examined in this cohort included mortality, clinical signs, body weights, food consumption, estrous cycle determination, anogenital distance, areola/nipple retention, sexual maturation, hematology, urinalysis, clinical chemistry, coagulation, clinical pathology, serum thyroid hormones levels, gross necropsy, sperm examination and splenic lymphocyte subpopulation analysis. Cohort 1b: males sacrificed after successful mating; females at LD21-23. Cohort 1B remained on their respective diets and was used for mating. After 10 weeks of dosing, males and females were mated on a 1:1 basis. F1 females were allowed to deliver naturally and were sacrificed on LD21-23, F2 pups were sacrificed on PND 21-23. Parental F1 animals were evaluated for terminal body weight, gross necropsy and organ weights. F2 pups were evaluated for mortality, postnatal development, clinical signs, body weights, sex, anogenital distance, number of areola/nipples, organ weights (brain, liver, thyroid and parathyroid glands, spleen, and thymus) and gross lesions. F2 pups were sacrificed on PND21-23. Brain, liver, thyroid and parathyroid glands, spleen, and thymus were weighed. Cohort 1c: Cohort 1c remained on their respective diets until the time of sacrifice (after sexual maturation), and necropsy was performed. RESULTS: F0: No compound-related deaths occurred. No compound-related clinical signs of toxicity were observed. Transient significant differences in body weight or body weight gains were seen at times during the study; however, overall mean body weight gain during pre-mating was not different from controls. During gestation in the high dose female group, significant decreases in body weight gain (-9%) and in body weights on GD20 (-5%) were seen; however, the study authors attribute this to the decrease in mean litter weight. Food consumption was not significantly different from control. Slight changes in hematological parameters and clinical biochemistry were within the normal ranges and not toxicologically relevant. In males, total serum T4 levels were statistically decreased in the mid- and high-dose groups compared to control; however, the study authors did not consider these toxicologically relevant because values remained within the normal range. No significant differences in total serum T4 in females or TSH levels in either sex were seen. No differences in urine parameters were seen compared with controls. In F0 males, absolute and relative thyroid weights were significantly increased in the high-dose group (14% and 18%, respectively) compared with controls. In females, a significant increase in absolute thyroid weight (24%) was seen in the high-dose group, and an increase in relative thyroid weight was observed in the low (21%), mid (16%) and high (28%) dose groups, compared with controls. No other compound-related differences were seen in other organs. No test-related macroscopic findings were observed. In the thyroid, increased incidences of follicular cell hypertrophy were seen in males (0/25, 1/25, 5/25, and 5/25) and females (0/25, 1/24, 2/24, and 5/25) in the control, low-, mid-, and high-dose groups, respectively. The increase was not statistically significant but correlated with the increase in thyroid weight. No other compound-related differences were seen in other organs. There were no compound-related significant differences in estrous cycle, pre-coital time, mating index, fertility index, mean number of implantations, or gestation length, or in mean epididymal sperm counts, sperm morphology or sperm motility. No differences in gestational index, duration of gestation or pre-birth loss, live birth index, pup viability, lactation index, sex ratio, anogenital distance, areola or nipple retention were observed. F1 pups during lactation: No compound-related mortality or clinical signs of toxicity were observed. Body weights were non-significantly decreased in males on PND1 (3.1%, 6.1%, and 8.9%) and PND21 (2.8%, 6.1%, and 11.2%) and in females on PND1 (3.9%, 4.9%, and 7.6%) and PND 21 (2.8%, 4.6%, and 10.8%) in the low-, mid- and high-dose groups respectively, compared with controls. These changes in body weights were not considered by the study authors to be adverse because mean body weights were in range or very close to historical control data. No differences in total T4 or TSH levels in F1 pups at PND4 or PND21 were seen, compared to controls. No difference in anogenital distance or areola/nipple or compound-related effects on mean ages of attainment of balanopreputal cleavage and vaginal opening, or on the duration from vaginal opening to time of first estrus for F1 animals was observed. In F1 offspring post-weaning (all cohorts), no unscheduled deaths occurred, and no compound-related clinical signs of toxicity were observed. Dose-related decreases in male and female body weights seen prior to mating and during gestation were not considered toxicologically relevant by study authors due to the low magnitude of change (7-18% in males; 5-9% in females pre-mating and 8-16% during gestation) and absolute body weight in males at termination in the high dose group was not significantly different from historic controls. Food intake was significantly decreased in males (5-10%) and in females during gestation (6, 7, and 12% in the low-, mid-, and high-dose groups, respectively), compared with controls. No compound-related macroscopic changes were observed in any F1 cohort. Cohort 1a: No toxicologically relevant hematological changes or changes in clinical biochemistry were seen in F1 pups (cohort 1a). In high-dose F1 males, total serum T4 levels were significantly decreased and TSH levels were non-significantly increased, compared with controls, but remained within normal range. In F1 females, serum TSH levels in the high-dose group were higher than the reported normal range (0.22 uIU/mL compared to the normal range of 0.02-0.2 uIU/mL). No differences in female T4 levels were seen compared to control. No compound-related changes in urine parameters were seen. Compared to controls, absolute and relative thyroid weights were significantly increased in males in the low-dose (15 and 25%), mid-dose (16 and 30%) and high-dose (21 and 44%) groups, respectively. Relative, but not absolute, liver weights were increased in high-dose males, and relative thyroid weight was increased in high-dose females. No other significant differences in organ weights were seen, as compared to controls. Incidences of minimum follicular cellular hypertrophy in the thyroid were slightly (but non-significantly) increased in high-dose males (0/20, 0/20, 0/20, 3/20) but not in females (1/20, 0/20, 0/2, 2/20) in control, low-, mid-, and high dose groups, respectively. Incidence of minimum centrilobular hypertrophy in the liver was also increased in high-dose males (0/20, 0/20, 0/20, 6/20), but not females (0/20, 0/20, 0/20, 0/20) in control, low-, mid-, and high dose groups, respectively. No other compound-related histological changes were seen. Study authors did not consider changes observed in the thyroid and liver adverse citing the low magnitude of change and/or lack of histopathological changes correlating with organ weight differences. In F1 estrous cycle lengths or spermatogenic parameters were seen compared to control. The splenic lymphocyte subpopulation in F1 males and females was not significantly different from the control. In the males, F1 cohort sacrificed on PND21, no significant differences in thyroid weights were seen. Relative liver

Epidemiology Extraction Table: Irritation					
Measured Effect/ Endpoints	Study Population	Exposure	Results	Overall Quality Determination	Citation and HERO ID
Patch test Study Design: Other intentional dosing study Health Effect: Sensitization	adults male & female 422 participants in Korea	Galaxolide 50, 5% concentra- tion in petrolatum vehicle	Positive patch test in 5/422 (1.2%) of participants Comments: It is unclear whether the outcome mea- sured was an irritation or sensitization response	Low	An et al. 2005 2910944
Patch test Study Design: Other intentional dosing study Health Effect: Irritation	adults male & female 422 participants in Korea	Galaxolide 50, 5% concentra- tion in petrolatum vehicle	Positive patch test in 5/422 (1.2%) of participants Comments: It is unclear whether the outcome mea- sured was an irritation or sensitization response	Low	An et al. 2005 2910944
Patch test Study Design: Other intentional dosing study Health Effect: Sensitization	adults male & female 178 participants in Japan, Northern Ireland, United States, England, Switzer- land, and Sweden	1,3,4,6,7,8-hexahydro- 4,6,6,7,8,8- hexamethylcyclopenta-gamma- 2-benzopyran (HHCB), 7% petrolatum, concentration not reported	Positive patch tests in 3.4% of participants	Low	Larsen et al. 2001 5428193
Patch test Study Design: Other intentional dosing study Health Effect: Sensitization	adults male & female 178 participants in Japan, Northern Ireland, United States, England, Switzer- land, and Sweden	1,3,4,6,7,8-hexahydro- 4,6,6,7,8,8- hexamethylcyclopenta-gamma- 2-benzopyran (HHCB), 7% petrolatum, concentration not reported	Positive patch tests in 3.4% of participants	Low	Larsen et al. 2001 5428193

Epidemiology Extraction Table: Neurological/Behavioral					
Measured Effect/ Endpoints	Study Population	Exposure	Results	Overall Quality Determination	Citation and HERO ID
Absolute delta power from EEG spectral analysis Study Design: Controlled Trial Health Effect: Neurological/Behavioral	adults male & female 30 subjects (12 normal, 8 chemically intolerant, 10 chemically intolerant with lifestyle changes)	Galaxolide, 0.1v/v and 0.001 v/v	3-way interaction ANOVA results for absolute delta power, comparing pre/post galaxolide expo- sure:CZ electrode site: $F(2,27) = 8.31$, $p < 0.01$ PZ electrode site: $F(2,27) = 9.48$, $p < 0.001$ O1/O2 electrode site: $F(2,27) = 7.58$, $p < 0.01$ 3-way in- teraction ANOVA results for absolute theta power, comparing pre/post galaxolide exposure:PZ elec- trode site: $F(2,27) = 6.21$, $p < 0.01$ 3-way inter- action ANOVA results for absolute beta 1 power, comparing pre/post galaxolide exposure:PZ elec- trode site: $F(2,27) = 6.04$, $p < 0.01$ 3-way inter- action ANOVA results for absolute delta power, comparing high galaxolide vs. low galaxolide vs. distilled water:CZ electrode site: $F(4,54) = 3.86$, $p < 0.01$ O1/O2 electrode site: $F(4,45) = 4.07$, p < 0.01	Medium	Bell et al. 1999 5431388

Epidemiology Extraction Table: Sensitization

Measured Effect/ Endpoints	Study Population	Exposure	Results	Overall Quality Determination	Citation and HERO ID
Irritation (patch test) Study Design: Other intentional dosing study Health Effect: Irritation	adults male & female International Flavors & Fragrances (IFF) panel study (1964), United States, 40 participants (28 women, 12 men, ages 16-60+)	Galaxolide, 0.5 ml, 3.75% with alcohol SDA39C diluent	1/40 participants had minimal irritation; no statisti- cal significance testing performed	Medium	IFF 2008 8785221
Sensitization (patch test) Study Design: Other intentional dosing study Health Effect: Sensitization	adults male & female International Flavors & Fragrances (IFF) panel study (1964), United States, 40 participants (28 women, 12 men, ages 16-60+)	Galaxolide, 0.5 ml, 3.75% with alcohol SDA39C diluent	40/40 participants had no sensitization; no statisti- cal significance testing performed	Medium	IFF 2008 8785221
