MATERIAL SAFETY DATA SHEET

K27200

KOCIDE CHEMICAL CORPORATION

KOCIDE Chemical

EMERGENCY TELEPHONE: (713)433-6404

DATA SHEET NO. K-0701

DATE ISSUED 10-15-82

wholly owned subsidiary of Grillin Corporation

PRODUCT NAME COPPER SULFATE PENTAHYDRATE	CAS NO. 7758-98-7	CAS NAME Copper Sulfate
CHEMICAL FAMILY Weak acid of transition metal	CHEMICAL NAME & SYNONYMS Copper (II) Sulfate Pentahydrate	
CHEMICAL FORMULA $CuSO_4 \cdot 5H_2O$	TRADE NAME & SYNONYMS Copper Sulfate Pentahydrate; CSP; Blue Stone	

HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES	%	CURRENT TLV
NO HAZARDOUS INGREDIENTS		

PHYSICAL DATA

APPEARANCE (SOLID, LIQUID, GAS) Solid	MOLECULAR WEIGHT 249.71	MELT POINT NA	SPECIFIC GRAVITY 2.28
VAPOR DENSITY (AIR=1) NA	COLOR Blue	BULK DENSITY 50-60 lbs/ft^3	BOILING POINT NA
VAPOR PRESSURE NA	SOLUBILITY IN WATER 31.6 gm/100 cc at 0°C	ODOR NA	% VOLATILE BY VOLUME NA

FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED) NA	FLAMMABLE LIMIT Lel NA Uel	EXTINGUISHING MEDIA NA

SPECIAL FIRE FIGHTING PROCEDURES
NA

10114947

UNUSUAL FIRE OR EXPLOSION HAZARDS

NONE

TOXICITY DATA

LD_{50}, ORAL (INGESTION) Rats 960 mg/kg; Mice 33 mg/kg	LD_{50}, DERMAL (SKIN CONTACT) NE	INHALATION Strong irritant
FISH, LC_{50} (LETHAL CONCENTRATION) NE	TLV (UNITS) NE	SKIN IRRITATION Strong irritant
EFFECTS TO EYE Irritant	EFFECTS TO LUNG NE	OTHER Ingestion can cau diarrhea, achromotricia & anemia.

EMERGENCY AND FIRST AID PROCEDURES If inhaled, move to fresh air and contact physician. If ingested, give 1 oz. milk or milk of magnesia and contact physician immediately. If skin contacted, wash thoroughly with soap and water. For eyes, flush with copious amounts of water and contact physician.

NA - Not Applicable NE - Not Established

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REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
Stable	Slight efflorescence in air. Loss of H_2O above 30°C.
POLYMERIZATION NA	CONDITIONS TO AVOID

INCOMPATIBILITY (MATERIALS TO AVOID)
Hydroxylamine

HAZARDOUS DECOMPOSITION PRODUCTS

SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Flush with water or collect in containers for disposal or for copper recovery.

WASTE DISPOSAL METHOD
Contaminated materials should be placed in drums and shipped to chemical dump for disposal in accordance with federal, state and local regulations.

SPECIAL PROTECTION DATA

RESPIRATOR TYPE
Dual cartridge respirator for dusts and mists.

EYE PROTECTION	GLOVES
Protective goggles	Rubber

OTHER PROTECTIVE EQUIPMENT
Good ventilation

SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE	AVERAGE SHELF LIFE
Below 30°C	Indefinite below 30°C

SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE)
Loss of water occurs above 30°C.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Store in clean dry area. Keep containers tightly closed. Exercise normal handling precautions for solid materials.

SHIPPING DATA

D.O.T. SHIPPING NAME	TECHNICAL SHIPPING NAME
Copper Sulfate	Cupric Sulfate
D.O.T. HAZARD CLASSIFICATION PRIMARY: NA	SECONDARY:
D.O.T. LABELS REQUIRED None	FREIGHT CLASSIFICATION Copper Compound NOI

PREPARED BY:	TITLE:	APPROVED BY:	TITLE:
J. O'Neal	Tech Director	[illegible]	President
DATE PREPARED: Oct 15, 1982		DATE APPROVED: 11/1/82	

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