

MATERIAL SAFETY DATA SHEET

P.27200

KOCIDE CHEMICAL CORPORATION

**KOCIDE**

EMERGENCY TELEPHONE:  
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DATA SHEET NO. K-0701

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wholly owned subsidiary  
of Griffin Corporation

**Chemical**

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 <sub>4</sub> ·5H <sub>2</sub> O	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 <sup>3</sup>	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 <sub>50</sub> , ORAL (INGESTION) Rats 960 mg/kg; Mice 33 mg/kg	LD <sub>50</sub> , DERMAL (SKIN CONTACT) NE	INHALATION Strong irritant
FISH, LC <sub>50</sub> (LETHAL CONCENTRATION) NE	TLV (UNITS) NE	SKIN IRRITATION Strong irritant
EFFECTS TO EYE Irritant	EFFECTS TO LUNG NE	OTHER Ingestion can cause 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

## REACTIVITY DATA

STABILITY Stable	CONDITIONS TO AVOID Slight efflorescence in air. Loss of H <sub>2</sub> O 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 Protective goggles	GLOVES Rubber
OTHER PROTECTIVE EQUIPMENT Good ventilation	

## SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE Below 30°C	AVERAGE SHELF LIFE 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 Copper Sulfate	TECHNICAL SHIPPING NAME Cupric Sulfate
D.O.T. HAZARD CLASSIFICATION PRIMARY: NA	SECONDARY:
D.O.T. LABELS REQUIRED None	FREIGHT CLASSIFICATION Copper Compound NOI

PREPARED BY: <i>M O'Neal</i>	TITLE: <i>Tech Director</i>	APPROVED BY: <i>[Signature]</i>	TITLE: <i>President</i>
DATE PREPARED: <i>Oct 15, 1982</i>		DATE APPROVED: <i>11/1/82</i>	

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