

MATERIAL SAFETY DATA SHEET

ISSUED: 06/08/91

SUPPLIER: Roto Corporation
ADDRESS: 3505 W. Grand River
CITY: Howell, Michigan 48843
TEL: 517-546-8330

EMERGENCY CONTACT: CHEMTREC 1-800-424-9300

NOTE: EMERGENCY TELEPHONE NUMBERS ARE TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS. ALL NON-EMERGENCY QUESTIONS SHOULD BE DIRECTED TO CUSTOMER SERVICE.

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: Roto Root Killer
COMMON SYNONYMS: COPPER SULFATE; COPPER (II) SULFATE, PENTAHYDRATE; BLUE VITRIOL
CHEMICAL FAMILY: COPPER COMPOUNDS
FORMULA: CUSO4 5H2O
FORMULA WT.: 249.68
CAS NO.: 7758-99-8
NIOSH/RTECS NO.: GL8900000

PRECAUTIONARY STATEMENT

HEALTH - 2 MODERATE
FLAMMABILITY - 0 NONE
REACTIVITY - 0 NONE
CONTACT - 2 MODERATE

U.S. PRECAUTIONARY STATEMENT

WARNING CAUSES IRRITATION. HARMFUL IF SWALLOWED. AVOID CONTACT WITH EYES, SKIN, CLOTHING. AVOID BREATHING DUST. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

INTERNATIONAL STATEMENT

HARMFUL IF SWALLOWED. IRRITATING TO RESPIRATORY SYSTEM AND SKIN. DO NOT BREATHE DUST. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF SOAP AND WATER.

SECTION II - COMPONENTS

Table with 6 columns: COMPONENT, CAS NO., WEIGHT %, OSHA/PEL, ACGIH/TLV. Row 1: CUPRIC SULFATE, 5-HYDRATE, 7758-99-8, 90-100, 1 MG/M3, 1 MG/M3

SECTION III - PHYSICAL DATA

BOILING POINT: N/A VAPOR PRESSURE (MMHG): N/A
MELTING POINT: 653 C (1207 F) DECOMPOSES VAPOR DENSITY (AIR=1): N/A
(AT 760 MM HG)
SPECIFIC GRAVITY: 2.28 EVAPORATION RATE: N/A
(H2O=1)
SOLUBILITY (H2O): APPRECIABLE (>10%) % VOLATILES BY VOLUME: 0 (21 C)

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PH: N/A

ODOR THRESHOLD (P.P.H.): N/A

PHYSICAL STATE: SOLID

COEFFICIENT WATER/OIL DISTRIBUTION: N/A

APPEARANCE & ODOR: BLUE CRYSTALS OR GRANULES. ODORLESS

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (CLOSED CUP): N/A

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: UPPER - N/A

LOWER - N/A

FIRE EXTINGUISHING MEDIA

USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES

FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE.

UNUSUAL FIRE & EXPLOSION HAZARDS: NOTE: DECOMPOSES AT MELTING POINT.

TOXIC GASES PRODUCED: SULFUR DIOXIDE

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT: NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE: NONE IDENTIFIED

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SECTION V - HEALTH HAZARD DATA

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THRESHOLD LIMIT VALUE (TLV/TWA): 1 MG/M3

TLV IS FOR COPPER, DUSTS AND MISTS, AS CU.

SHORT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED

PERMISSIBLE EXPOSURE LIMIT (PEL): 1 MG/M3

PEL IS FOR COPPER DUST AND MIST, AS CU

TOXICITY OF COMPONENTS

ORAL RAT LD50 FOR CUPRIC SULFATE, 5-HYDRATE 300 MG/KG INTRAPERITONEAL HOUSE LD50 FOR CUPRIC SULFATE, 5-HYDRATE 33 MG/KG CARCINOGENICITY: NTP: NO IARC: NO
Z LIST: NO OSHA REG: NO

CARCINOGENICITY: NONE IDENTIFIED.

REPRODUCTIVE EFFECTS: NONE IDENTIFIED.

EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT, IRRITATION OF MUCOUS MEMBRANES

SKIN CONTACT: IRRITATION

EYE CONTACT: IRRITATION

SKIN ABSORPTION: NONE IDENTIFIED

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INGESTION: NAUSEA, VOMITING, DIARRHEA, GASTROINTESTINAL PAIN
CHRONIC EFFECTS: BLOOD DAMAGE

TARGET ORGANS

EYES, SKIN, BLOOD

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY

INHALATION, INGESTION, SKIN CONTACT, EYE CONTACT

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: CALL A PHYSICIAN. IF SWALLOWED, IF CONSCIOUS, GIVE LARGE AMOUNTS OF WATER. INDUCE VOMITING.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

SKIN CONTACT: IN CASE OF CONTACT, FLUSH SKIN WITH WATER.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO

CERCLA HAZARDOUS SUBSTANCE: YES CONTAINS COPPER SULFATE (RQ = 10 LBS)

SARA 313 TOXIC CHEMICALS: YES CONTAINS COPPER

GENERIC CLASS: C15

TSCA INVENTORY: YES

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SECTION VI - REACTIVITY DATA

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STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: HEAT

INCOMPATIBLES: STRONG REDUCING AGENTS, STRONG OXIDIZING AGENTS, MAGNESIUM

DECOMPOSITION PRODUCTS: OXIDES OF SULFUR

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SECTION VII - SPILL & DISPOSAL PROCEDURES

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STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE

WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. WITH CLEAN SHOVEL, CAREFULLY PLACE MATERIAL INTO CLEAN, DRY CONTAINER AND COVER; REMOVE FROM AREA. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS.

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS UP TO 8 PPM, A DUST/MIST RESPIRATOR IS RECOMMENDED. ABOVE THIS LEVEL, A SELF-CONTAINED BREATHING APPARATUS IS ADVISED.

EYE/SKIN PROTECTION SAFETY GOGGLES, UNIFORM, RUBBER GLOVES ARE RECOMMENDED.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA ISOLATE FROM INCOMPATIBLE MATERIALS.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CUPRIC SULFATE)
HAZARD CLASS: ORM-E
UN/NA: NA9188 REPORTABLE QUANTITY: 10 LBS.
LABELS: NONE
REGULATORY REFERENCES: 49CFR 172.101; 173.500; 173.510

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 2833250000

N/A = NOT APPLICABLE OR NOT AVAILABLE N/E = NOT ESTABLISHED

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