

MATERIAL SAFETY DATA SHEET -19-
 Product Name:
HERCULES R-D (ROOT DESTROYER)
 DATE PREPARED 01/31/92 DATE ISSUED 04/30/02

ISSUED TO:
 FIRST SUPPLY MADISON
 6800 GISHOLT DRIVE
 MADISON WI 53708

SECTION 1



MATERIAL SAFETY INFORMATION SERVICE

Hercules Chemical Company, Inc.
 111 South Street • Passaic, NJ 07055-7398
 Information Phone: 800-221-9330

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED (Dust/Mist)*	% (OPTIONAL)
Copper Sulphate Pentahydrate (CAS 7758-99-8)	1.0mg/M3*	1.0mg/M3*	* As Copper	98%

Copper Compounds are SARA 313 Reportable Product Upper Bound Limit 98%

HMIS Hazard Rating: 2 0 0 E

40XR D00.2

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT N/A	SPECIFIC GRAVITY (H2O = 1) 2.284	VAPOR DENSITY (AIR = 1) N/A
VAPOR PRESSURE (mm Hg.) N/A	MELTING POINT N/A	EVAPORATION RATE (Butyl Acetate = 1) N/A
SOLUBILITY IN WATER: Dissolves in water (24.2gms/100gms at 30 deg. C.)		
APPEARANCE AND COLOR: Blue granular crystals. No odor.		

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT Non-Flammable	FLAMMABLE LIMITS N/A	LEL N/A	UEL N/A
EXTINGUISHING MEDIA Does not burn or support combustion.	SPECIAL FIRE FIGHTING PROCEDURES Use extinguishing media as appropriate for surrounding fire. Use CO2 dry chemical or water. Avoid direct water stream on molten material, splattering may occur.		
UNUSUAL FIRE AND EXPLOSION HAZARDS Heated above 110 Deg C will melt & flow. Sealed containers may rupture when heated due to release of water from crystals. Material is acidic when dissolved in water, contact with magnesium metal may evolve hydrogen gas. Anhydrous cupric (CONTINUED IN SECTION "A" AT BOTTOM OF PG 2)			

SECTION 5 - REACTIVITY DATA

STABILITY STABLE	CONDITIONS TO AVOID High heat and reducing agents.
INCOMPATIBILITY (MATERIALS TO AVOID)	Contact with magnesium metal may generate dangerous level of hydrogen gas.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS	Above 600 deg.C SO2 may evolve; none at normal process temperature and pressures.
HAZARDOUS POLYMERIZATION	Will not occur

SECTION 6 - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY	INHALATION? Yes/Primary	SKIN? Yes/Primary	INGESTION? Yes/Secondary
HEALTH HAZARDS (ACUTE AND CHRONIC) May cause nose irritation. Chronic hazard is very rare except in individuals with Wilson's Disease.			
CARCINOGENICITY:	NTP? NO	IARC MONOGRAPHS? NO	OSHA REGULATED? NO

Date copied and placed into MSDS:
06/23/03

SIGNS AND SYMPTOMS OF EXPOSURE

Localized skin discoloration, itching, eye irritation, ulceration of nasal septum may occur. Repeated or prolonged skin contact may cause dermatitis

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Wilson's Disease (Individual absorbs, retains and stores copper excessively).

EMERGENCY AND FIRST AID PROCEDURES

Treat most urgent symptoms first. Cessation of breathing, eye injury, skin contact, shock. In all cases seek medical attention. INHALATION: Move to fresh air, administer CPR, if required. EYES: Flush with large amounts of water at (CONTINUED IN SECTION "B" AT BOTTOM OF PAGE)

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep up crystals or powder, vacuum is preferred. Prevent accidental entry of solution into streams and other bodies of water.

WASTE DISPOSAL METHOD

For disposal of large quantities of waste, consult appropriate Federal, State or Local officials.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in closed containers in cool, dry and well ventilated area away from heat sources & reducing agents. Use good housekeeping practice to prevent dust accumulation.

OTHER PRECAUTIONS

Avoid breathing dust or solution mist.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE)

Where the possibility of dust exists use NIOSH/MSHA approved dust mask.

VENTILATION	LOCAL EXHAUST	Adequate	SPECIAL	N/A
	MECHANICAL (GENERAL)	N/A	OTHER	N/A

PROTECTIVE GLOVES Rubber

EYE PROTECTION Chemical goggles where splashing possible.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT None

WORK/HYGIENIC PRACTICES

Use good personal hygiene. Wash hands before eating.
Avoid inhalation or ingestion.

-- SECTION "A"-- sulfate formed on water loss (white color). Anhydrous salt will ignite hydroxylamine if present. At temperature greater than 600 deg.C decomposes to cupric oxide and sulfur dioxide.
-- SECTION "B"-- least 15 minutes. Hold lids open during flushing. SKIN: Flush with large amounts of water at least 15 minutes. Remove contaminated clothing. INGESTION: May cause severe GI tract irritation. Give conscious victim 2-3 glasses of milk and water to drink. Induce vomiting in conscious person. Get medical attention.

-19-HERCULES R-D (ROOT DESTROYER)