



Root Destroyer

Material Safety Data Sheet

Information on this form is furnished solely for the purpose of compliance with the Occupational Safety and Health Act and shall not be used for any other purpose. Black Swan Manufacturing Co. urges the customers receiving this Material Safety Data Sheet to study it carefully to become aware of the hazards, if any, of the product involved. In the interest of safety, you should notify your employees, agents, and contractors of the information on the sheet.

SECTION I - GENERAL INFORMATION				
Black Swan Manufacturing Co. 4540 W. Thomas Street Chicago, IL 60651-3318 Telephone No: 1-773-227-3700 Fax No: 1-773-227-3705		For chemical emergencies during transportation only call INFOTRAC 1-800-535-5053 24 hours per day - 7 days a week		
Date Prepared 01/01/08		Trade Name ROOT DESTROYER		
SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION				
HAZARDOUS COMPONENTS	CAS#	APPROX%	ACGIH-TLV	OSHA-PEL
COPPER SULFATE PENTAHYDRATE *DUST/MIST AS COPPER	7758-99-8	99%	1.0*mg/M3	1.0*mg/M3
*Title III Section 313 Supplier Notification: this product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency planning and community Right-to-Know Act of 1966 and of 40CFR372. This information must be included in all MSDS's that are copied and distributed for this material.				
SHIPPING INFORMATION		SPECIAL HAZARD DESIGNATIONS		
		<u>HMIS</u> <u>HAZARD RATING</u>		

<p>FOR 2 LB. CONTAINER SIZE</p> <p>CONSUMER COMMODITY ORM-D</p> <p>FOR CONTAINER ABOVE 2 LB. SIZE</p> <p>SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (CUPRIC SULFATE)</p> <p>HAZARD CLASS 9</p> <p>LD. NO. UN3077</p> <p>PACKIN GROUP III</p> <p>FREIGHT CLASS 55</p> <p>LABEL REQUIRED NONE</p>	<table> <tr> <td>HEALTH</td> <td>1</td> <td>0 - MINIMAL</td> </tr> <tr> <td>FLAMMABILITY</td> <td>0</td> <td>1- SLIGHT</td> </tr> <tr> <td>REACTIVITY</td> <td>1</td> <td>2- MODERATE</td> </tr> <tr> <td>PROTECTIVE</td> <td></td> <td>3- SERIOUS</td> </tr> <tr> <td>EQUIPMENT</td> <td>E</td> <td>4- SEVERE</td> </tr> </table>	HEALTH	1	0 - MINIMAL	FLAMMABILITY	0	1- SLIGHT	REACTIVITY	1	2- MODERATE	PROTECTIVE		3- SERIOUS	EQUIPMENT	E	4- SEVERE
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<p>SECTION III - PHYSICAL DATA</p>																
<p>APPEARANCE TRANSPARENT BLUE CRYSTALS, GRANULES OR POWDER.</p>	<p>ODOR ODORLESS</p>	<p>BOILING POINT -5H₂O@150Å° C (760 mmHg)</p>														
<p>SPECIFIC GRAVITY (H₂O=1) 2.284</p>	<p>VAPOR PRESSURE (mm Hg.) N/A</p>	<p>VOLATILE BY VOLUME (%) N/A</p>														
<p>VAPOR DENSITY (AIR=1) N/A</p>	<p>EVAPORATION RATE (BUAC=1) N/A</p>	<p>SOLUBILITY IN WATER 30Å° C Å· 24.3g/100g 100Å° C Å· 203.3g/100</p>														
<p>SECTION IV - FIRE AND EXPLOSION HAZARD DATA</p>																
<p>FLASH POINT (METHOD USED)</p> <p>N/A</p>	<p>FLAMMABLE LIMITS</p> <p>(PERCENT BY VOLUME)</p>	<p>LEL</p> <p>N/A</p>	<p>UEL</p> <p>N/A</p>													
<p>FIRE EXTINGUISHING MEDIA DOES NOT BURN OR SUPPORT COMBUSTION.</p>																
<p>SPECIAL FIRE FIGHTING PROCEDURES USE EXTINGUISHER MEDIA FOR SURROUNDING FIRE, CO₂, DRY CHEMICAL OR WATER. AVOID DIRECT WATER STREAM ON MOLTEN MATERIAL (SPLATTERING OCCURS).</p>																
<p>UNUSUAL FIRE AND EXPLOSION HAZARD SEALED CONTAINERS MAY RUPTURE WHEN HEATED DUE TO RELEASE OF WATER FROM CRYSTALS, MATERIAL IS ACIDIC WHEN DISSOLVED IN WATER, CONTACT</p>																

WITH MAGNESIUM METAL MAY EVOLVE HYDROGEN GAS. ANHYDROUS CUPRIC SULFATE FORMED ON WATER LOSS(WHITE COLOR). ANHYDROUS SALT WILL IGNITE HYDROXYLAMINE - IF PRESENT. AT TEMPERATURES GREATER THAN 600° C DECOMPOSES TO CUPRIC OXIDE AND SULFUR DIOXIDE.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OR ENTRY Inhalation Skin contact Eye contact Ingestion

EFFECT OF OVEREXPOSURE

LOCALIZED SKIN DISCOLORATION, ITCHING, EYE IRRITATION, ULCERATION OF NASAL SEPTUM MAY OCCUR, REPEATED OR PROLONGED SKIN CONTACT MAY CAUSE DERMATITIS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

WILSON'S DISEASE OR G6PD DEFICIENCY (INDIVIDUAL ABSORBS, RETAINS AND STORES COPPER EXCESSIVELY). SYMPTOMS MAY INCLUDE NAUSEA, VOMITING, EPIGASTRIC PAIN, DIARRHEA, DIZZINESS, JAUNDICE, AND GENERAL DEBILITY.

EMERGENCY AND FIRST AID PROCEDURES

TREAT MOST URGENT SYMPTOMS FIRST: CESSATION OF BREATHING, EYE INJURY, SHOCK, SKIN CONTACT. IN ALL CASES SEEK MEDICAL ASSISTANCE.

SECTION VI - REACTIVITY

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	HIGH HEAT, REDUCING AGENTS.

INCOMPATIBILITY (MATERIALS TO AVOID)

CONTACT WITH MAGNESIUM METAL MAY GENERATE DANGEROUS LEVELS OF HYDROGEN GAS.

HAZARDOUS DECOMPOSITION PRODUCTS

ABOVE 600° C, SO2 MAY BE EVOLVED. NONE AT NORMAL PROCESS TEMPERATURES.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

SWEEP UP CRYSTALS OR POWDER, VACUUM IS PREFERRED. IF SPILLED

SOLUTIONS IS IN A CONFINED AREA, INTRODUCE LIME OR SODA ASH TO FORM INSOLUBLE COPPER SALTS AND DISPOSE OF BY AN APPROVED METHOD. PREVENT ACCIDENTAL ENTRY OF SOLUTION INTO STREAMS AND OTHER WATER BODIES.

WASTE DISPOSAL METHOD

CONTACT APPROPRIATE LOCAL, STATE, AND FEDERAL OFFICIALS. IF ACCIDENTALLY SPILLED INTO PUBLIC WATER, CONSULT REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

NIOSH APPROVED RESPIRATOR FOR TOXIC DUSTS AND MISTS.

VENTILATION

LOCAL EXHAUST - AS APPROPRIATE FOR POINT SOURCES.

MECHANICAL - IF ADEQUATE TO CONTROL DUST LEVEL TO BELOW TLV.

PROTECTIVE GLOVES

IMPERMEABLE

EYE PROTECTION

CHEMICAL GOGGLES WHERE SPLASHING POSSIBLE.

OTHER PROTECTIVE EQUIPMENT AND HYGIENIC PRACTICES

EYE WASH STATIONS SHOULD BE AVAILABLE IN WORK AREAS.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE IN CLOSED CONTAINERS IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM HEAT SOURCES AND REDUCING AGENTS. USE GOOD HOUSEKEEPING PRACTICES TO PREVENT DUST ACCUMULATION.

OTHER PRECAUTIONS

AVOID BREATHING DUST OR SOLUTION MIST. IMPLEMENT PROPER ENGINEERING AND ADMINISTRATIVE CONTROLS, AND/OR WEAR PERSONAL PROTECTIVE EQUIPMENT AS NECESSARY TO

CONTROL HUMAN EXPOSURE TO BELOW APPLICABLE EXPOSURE LIMITS.

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

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