

Material Safety Data Sheet

Effective Date: 03-MAY-2012
Product: COPPER-Z 4/4

I. IDENTIFICATION

Chemical Name: COPPER SULFATE PENTAHYDRATE
Chemical Family: ALGICIDE/HERBICIDE
Formula: NOT APPLICABLE, FORMULATED MIXTURE.
Synonyms: NONE
CAS Number: SEE INGREDIENT STATEMENT, SECTION III.
EPA Number: 5905-486

II. PHYSICAL DATA

Boiling Point: >100 DEGREES C.
Freezing Point: <32 DEGREES F.
Spec Gravity: 1.225-1.25 GMS/CC
Vapor Pressure: 21 MM HG
Vapor Density: NOT ESTABLISHED
Solubility: 97.50%
Volatiles: <0.5%
Evaporation: NOT ESTABLISHED
Melting Point: NOT APPLICABLE
Appearance: CLEAR BLACK TO BLUE LIQUID, AMMONIA ODOR.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
COPPER SULFATE PENTAHYDRATE	7758-99-8	15.9	1 MG/M3	SEVERE EYE IRRITANT.
INERT INGREDIENTS		84.1		SKIN & EYE IRRITANT.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: NON-COMBUSTIBLE
Autoignition Temp: NOT APPLICABLE
Flammable Limit: NOT APPLICABLE
Extinguishing Media: NON-COMBUSTIBLE LIQUID. USE EXTINGUISHING MEDIA FOR UNDERLYING CAUSE OF FIRE.
Special Fire Fight Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT. USE WATER SPRAY TO COOL CONTAINERS EXPOSED TO HEAT AND FLAME.
Fire and Expl Hazard: PRODUCT MAY PRODUCE TOXIC FUMES UNDER FIRE CONDITIONS.

Material Safety Data Sheet

Effective Date: 03-MAY-2012
Product: COPPER-Z 4/4

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: THE ACUTE ORAL LD50 (RATS) = 1280 MG/KG.
HARMFUL IF SWALLOWED.
Skin Absorption: THE ACUTE DERMAL LD50 (RATS) = >2020 MG/KG.
HARMFUL IF ABSORBED THROUGH SKIN.
Inhalation: THE ACUTE INHALATION LC50 (RATS) = >5.64
MG/L/4H.
Skin contact: IRRITATING TO THE SKIN AFTER CONTACT. NOT A
SKIN SENSITIZER.
Eye Contact: CORROSIVE, CAUSES IRREVERSIBLE EYE DAMAGE.
Chronic Effects: NONE CURRENTLY KNOWN.
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: DRINK A LARGE QUANTITY OF MILK, EGG WHITES OR
GELATIN SOLUTION. DO NOT INDUCE VOMITING.
OBTAIN MEDICAL ATTENTION IMMEDIATELY.
Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER.
OBTAIN MEDICAL ATTENTION IF IRRITATION
DEVELOPS.
Inhalation: MOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IF
IRRITATION DEVELOPS.
Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING
EYELIDS OPEN. OBTAIN MEDICAL ATTENTION.
Notes to Physician: IN THE EVENT OF AN ADVERSE RESPONSE, TREATMENT
SHOULD BE DIRECTED TOWARD CONTROL OF THE
SYMPTOMS. PROBABLY MUCOSAL DAMAGE MAY
CONTRAINDICATE USE OF GASTRIC LAVAGE.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: NONE CURRENTLY KNOWN.
Polymerization: Will Not Occur
Conditions to Avoid: NONE CURRENTLY KNOWN.
Incompatibility material: PRODUCT MAY REACT VIGOROUSLY WITH ALKALINE
MATERIALS.
Hazardous Combustion: SULPHUR DIOXIDE, OXIDES OF CARBON, AND AMMONIA
UNDER FIRE CONDITIONS.

Material Safety Data Sheet

Effective Date: 03-MAY-2012
Product: COPPER-Z 4/4

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: CAPTURE PRODUCT, REUSE MATERIAL IF UNCONTAMINATED. IF CONTAMINATED, ABSORB MATERIAL WITH AN ABSORBENT SUCH AS CLAY OR SAND AND PLACE IN SUITABLE CONTAINER FOR PROPER DISPOSAL. DO NOT CONTAMINATE WATER SUPPLIES.

Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: UNDER UNCONTROLLED CONDITIONS, USE NIOSH/MSHA CARTRIDGE TYPE RESPIRATOR APPROVED FOR AMMONIA GAS.

Ventilation: LOCAL EXHAUST SUFFICIENT.

Gloves: IMPERVIOUS

Eyes: SPLASH PROOF GOGGLES.

Other: EYE WASH STATION, IMPERVIOUS APRON AND FOOTWEAR.

IX. SPECIAL PRECAUTIONS

Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED OR CONSUMED BY HUMANS OR ANIMALS. DO NOT CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR PONDS.

Other precaution: DANGER! CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF SWALLOWED. HARMFUL IF ABSORBED THROUGH SKIN. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

X. SHIPPING INFORMATION

Shipping name: NOT REGULATED BY DOT
Hazard Class: NONE
Identification No: NONE
Labels Required: NONE
Placarding: NONE

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

16-MAY-2012 13:57:26
Page 4 Of 4

Material Safety Data Sheet

Effective Date: 03-MAY-2012
Product: COPPER-Z 4/4

Freight Class: PESTICIDES, N.O.I., HERBICIDES, OTHER THAN
POISON (NMFC ITEM 155050, SUB 11, CLASS 70)
Chemical Name Equivalent R.Q.

COPPER SULFATE PENTAHYDRATE 10 LBS (6.09 GAL)
(CAS NO 7758- 99-8)

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2 Fire: 0 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y Delayed (Chronic) Health: N
Sudden Release of pressure: N Fire: N
Reactive: N

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
Helena Chemical Company believes that the data contained herein is factual.
This data is not to be taken as a warranty or representation of legal
responsibility. It is offered solely for your consideration, investigation
and verification.