

Material Safety Data Sheet

Effective Date: 17-MAR-2003  
Product: TRACITE COPPER 6%

I. IDENTIFICATION

Chemical Name: CHELATED MICRONUTRIENTS  
Chemical Family: INORGANIC METAL SALTS  
Formula: NOT APPLICABLE, FORMULATED MIXTURE.  
Synonyms: TRACITE COPPER  
CAS Number: 7758-98-7 (CUPRIC SULFATE)  
EPA Number: NONE REQUIRED

II. PHYSICAL DATA

Boiling Point: >100 DEGREES C.  
Freezing Point: 30 DEGREES F.  
Spec Gravity: 1.194 GMS/CC  
Vapor Pressure: NOT APPLICABLE  
Vapor Density: NOT APPLICABLE  
Solubility: 99%  
Volatiles: <0.5%  
Evaporation: NOT APPLICABLE  
Melting Point: NOT APPLICABLE  
Appearance: CLEAR LIQUID

III. INGREDIENTS

| Material  | CAS Number | Percent | TLV         | Hazard                 |
|---|------------|---------|-------------|------------------------|
| PROPRIETARY BLEND OF COPPER<br>SULFATE, WATER AND CHEALATING<br>AGENTS.<br>TYPICAL COMPOSITION: COPPER<br>(CU) - 6.00%; SULFUR (S) -<br>3.50% |            | 100.00  | 15<br>MG/M3 | SKIN & EYE<br>IRRITANT |

IV. FIRE AND EXPLOSION HAZARD

Flash Point: NOT APPLICABLE  
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: USE SELF-CONTAINED BREATHING APPARATUS AND FULL  
PROTECTIVE EQUIPMENT. USE WATER SPRAY TO KEEP  
FIRE-EXPOSED CONTAINERS COOL.  
Fire and Expl Hazard: PRODUCT MAY GENERATE SULPHUR DIOXIDE AND OTHER  
TOXIC FUMES UNDER FIRE CONDITIONS.

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V. HEALTH HAZARD  
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Carcinogen Information: NONE CURRENTLY KNOWN.

ACUTE EFFECTS OF OVER EXPOSURE  
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Swallowing: TOXIC; ORAL LD50 (RAT) = 472 MG/KG.  
Skin Absorption: NONTOXIC DERMALLY.  
Inhalation: MAY CAUSE NOSE AND THROAT IRRITATION.  
Skin contact: MAY CAUSE SKIN IRRITATION WITH PROLONG OR  
REPEATED EXPOSURE.  
Eye Contact: CORROSIVE, MAY CAUSE SEVERE IRRITATION AND  
DAMAGE.  
Chronic Effects: INGESTION MAY CAUSE, NAUSEA, CRAMPS, SHOCK, AND  
CORROSIVE DAMAGE TO THE DIGESTIVE TRACT.  
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES  
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Swallowing: GIVE 2 GLASSES OF MILK OF MAGNESIA, MILK OR  
WATER, AND INDUCE VOMITING, REPEAT UNTIL VOMIT  
IS CLEAR. OBTAIN MEDICAL ATTENTION IMMEDIATELY.  
Skin: REMOVE CONTAMINATED CLOTHING. WASH SKIN  
THOROUGHLY WITH SOAP AND WATER. IF IRRITATION  
DEVELOPS, CONSULT A PHYSICIAN.  
Inhalation: MOVE TO FRESH AIR. IF BREATHING BECOMES  
DIFFICULT, OBTAIN MEDICAL ATTENTION  
IMMEDIATELY.  
Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING  
EYELIDS OPEN. IF IRRITATION DEVELOPS, CONSULT A  
PHYSICIAN.  
Notes to Physician: PROBABLY MUCOSAL DAMAGE MAY CONTRAINDICATE THE  
USE OF GASTRIC LAVAGE. MEASURES AGAINST  
CIRCULATORY SHOCK, RESPIRATORY DEPRESSION, AND  
CONVULSION MAY BE NEEDED. COPPER SULPHATE IS  
EMETIC AND HAS SELDOM BEEN FATAL.

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VI. REACTIVITY  
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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: PRODUCT MAY PRODUCE SULPHUR DIOXIDE AND OTHER  
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VII. SPILL OR LEAK PROCEDURES  
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Spill or Leak Proc: DIKE AND CONTAIN SPILL, ABSORB WITH AN  
ABSORBENT SUCH AS, SAND OR CLAY. TRANSFER TO  
SUITABLE CONTAINERS FOR PROPER DISPOSAL. DO NOT  
CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR  
PONDS.  
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO  
FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE  
RESOURCE CONSERVATION AND RECOVERY ACT.

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VIII. SPECIAL PROTECTION INFORMATION  
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Respiration: NONE NEEDED UNDER NORMAL CONDITIONS.  
Ventilation: LOCAL EXHAUST SUFFICIENT.  
Gloves: IMPERVIOUS  
Eyes: SPLASH PROOF GOGGLES.  
Other: EMERGENCY SHOWER, EYE WASH STATION, IMPERVIOUS  
APRON AND FOOTWEAR.

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IX. SPECIAL PRECAUTIONS  
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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. AVOID CONTACT. MAY BE CORROSIVE TO EYES,  
MUCOUS MEMBRANES, SKIN AND GASTROINTESTINAL  
TRACT.  
Other precaution: A) RCRA HAZARDOUS WASTE NUMBER:----- NOT LISTED  
B) SARA TITLE III, SECTION 313:----- NOT LISTED  
C) SARA THRESHOLD PLANNING QUANTITY: NOT LISTED  
D) CERCLA REPORTABLE QUANTITY:----- 10 LB.  
E) 49 CFR 172.101, APPENDIX A:----- HAZARDOUS  
SUBSTANCE  
F) 49 CFR 172.101, APPENDIX B:----- MARINE  
POLLUTANT

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X. SHIPPING INFORMATION  
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Shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCES,  
LIQUID, N.O.S., (CONTAINS CUPRIC SULFATE), 9,  
UN3082, PG III "ERG # 171"  
Hazard Class: CLASS 9  
Identification No: UN3082

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

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Labels Required: CLASS 9  
Placarding: NONE REQUIRED  
Freight Class: COMPOUND, FERTILIZER (MANUFACTURED FERTILIZER)  
LIQUID, NOIBN

| Chemical Name  | Equivalent R.Q. |
|----------------|-----------------|
| -----          | -----           |
| CUPRIC SULFATE | 10 LB/(4.54 KG) |

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XI. GENERAL PRODUCT INFORMATION  
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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: Y |
| Sudden Release of pressure: N | Fire: N                     |
| Reactive: N                   |                             |

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Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017  
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