



American International Chemical, Inc.

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MATERIAL SAFETY DATA SHEET

COPPER SULFATE PENTAHYDRATE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: August 2007

Synonyms: Cupric Sulfate, Blue vitriol

CAS #: 7758-99-8

DOT Hazard Class: Environmentally Hazardous Substance Solid, N.O.S, (Copper Sulfate)
UN 3077, Class 9, PG III, Misc.

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Copper Sulfate Pentahydrate 99.0% min.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Bluish odorless crystals ranging from powder to chunks. Is considered a hazard to the environment. Toxic gasses will be released in a fire. May cause minor irritations.

POTENTIAL HEALTH EFFECTS:

Eyes: May cause irritation.

Skin: May cause irritation and prolonged contact may cause dermatitis.

Inhalation: May cause irritation to the upper respiratory tract.

Ingestion: May cause severe irritation to the stomach.

CARCINOGENICITY: Not listed under OSHA, IARC, or NTP.

SECTION 4 - FIRST AID MEASURES

Skin: Remove contaminated clothing first and then wash off with soap and water.

Eyes: Flush immediately with plenty of water for at least 15 minutes.

Inhalation: Remove to the fresh air.

Ingestion: If the person is conscious, induce vomiting or give several glasses of water or milk to dilute.

With All Of The Above: Consult a physician if symptoms persist.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Not Flammable

Flammable Limits: Not Applicable

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures: Use fire fighting procedure that is appropriate to treat surrounding fire. Avoid direct water stream on molten material to prevent splattering.

Unusual Fire Explosion Hazard: Sealed containers may rupture when heated due to the release of water from crystals. Material is acidic when dissolved in water, contact 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.

Auto Ignition Temperature: Not Applicable

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. If spilled solution is in a confined area, introduce lime or soda ash to form insoluble copper salts and dispose of by an approved method.

SECTION 7 - HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area.

SKIN AND EYE PROTECTION:

Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: 1 mg/m³ (OSHA-PEL)
1 mg/m³ (ACGIH-TLV)

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 150 °C

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H2O=1): 2.28

Bulk Density: Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: 110 °C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Complete

pH: Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Cupric oxide and sulfur dioxide at temperatures greater than 600°C.

KEEP AWAY FROM: High heat and reducing agents. Contact with magnesium metal may generate dangerous levels of hydrogen gas.

SECTION 11 - TOXICOLOGICAL INFORMATION

Wilson's disease or GGPD Deficiency (Individual absorbs, retains and stores copper excessively). Symptoms may include nausea, vomiting, epigastric pain, diarrhea, dizziness, jaundice and general debility.

SECTION 12 - ECOLOGICAL INFORMATION

Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Environmentally Hazardous Substance Solid, N.O.S
TECHNICAL SHIPPING NAME: (Copper Sulfate)
D.O.T. HAZARD CLASS: UN 3077, Class 9, PG III, Misc.

SECTION 15 - REGULATORY INFORMATION

OSHA Status: Not Listed

TSCA Status: Listed

CERCLA R.Q.: 5,000 lbs (copper compound)

SARA TITLE III INFORMATION:

Section 302 Extremely hazardous Substance: Unlisted

Section 313 Toxic Chemicals: Listed as Copper Compound.

Section 311/312 Hazard Category: Immediate (acute) Health Hazard.

SECTION 16 - OTHER INFORMATION

Reason for Issue: Changed Date

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