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Copper Sulfate Pentahydrate
(CAS NO 7758-99-8)

MATERIAL SAFETY DATA SHEET
SDS/MSDS

Section 1: Identification

Product: Copper Sulfate Crystals

Product Code:

Copper Sulfate Pentahydrate: CAS NO 7758-99-8

Recommended Use: Laboratory and industrial & for professional use only

Restrictions on Use: Not for direct consumption or use in food, drugs, or cosmetics

Supplier Details:

Name: Tinker & Rasor

Address: 2828 FM 788, New Braunfels TX, 78130, United States

Phone: +1 (830) 253-5621

Emergency Contact: +1 (830) 253-5621

Section 2: Hazard Identification

- **Hazard Classification:**
 - Acute Toxicity (Oral): Category 4
 - Eye Damage/Irritation: Category 2A
 - Skin Corrosion/Irritation: Category 2
 - Aquatic Toxicity (Acute): Category 1
 - Aquatic Toxicity (Chronic): Category 1
- **Label Elements:**
 - **Signal Word:** **Danger**
 - **Pictograms:**



Hazardous to the
aquatic environment



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- **Hazard Statements:**
 - **Physical Hazards:** None
 - **Health Hazards:**
 - H302: Harmful if swallowed
 - H313: May be harmful in contact with Skin
 - H315: Causes skin irritation
 - H319: Causes serious eye irritation
 - **Environmental Hazards:**
 - H400: Very toxic to aquatic life
 - H410: Very toxic to aquatic life with long lasting effects.
 - **Precautionary Statements:**
 - P102: Keep out of reach of children
 - P202: Do not handle until all safety precautions have been read and understood
 - P261: Avoid breathing dust
 - P273: Avoid release to environment
 - P280: Wear protective gloves, clothing and eye protection
 - **Response Statements:**
 - P301 +310+ P331: IF SWALLOWED: USA Immediately call the National POISON CENTER at 800-222-1222. DO NOT induce vomiting
 - P303+P361+353: IF ON SKIN Take off immediately all contaminated clothing. Rinse skin with water
 - P304+340: IF INHALED, remove to fresh air and keep comfortable for breathing
 - P305+P351: IF IN EYES rinse cautiously with water for at least 15 minutes
 - P306+P361: IF ON CLOTHING, Take off contaminated clothing
 - P370: In case of fire use foam, carbon dioxide, dry chemical to extinguish fire
 - P376: Stop leaks if safe to do so. See section 6 for proper clean up
 - **Storage Statement:**
 - P403: Keep cool store in a well-ventilated place
 - **Disposal Statements:**
 - P501: Dispose of content and/or container in accordance with local, regional, national or international regulations



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Section 3: Composition/Information on Ingredients

Component	CAS Number	Concentration
Copper (II) Sulfate Pentahydrate	7758-99-8	>99

Synonyms: Copper Sulfate Crystals, Blue Copper, Blue Stone, Blue Vitriol, Copper (II) sulfate, Cupric Sulfate, Copper Sulfate Fine 200, Fine 100, Fine 30, 20, 25, Small, Medium, Large, FCC IV, and Very High Purity

Section 4: First Aid Measures

- **Potential Health Effects: Eyes**
 - Exposure to particulates or solution of this product may cause redness and pain. Prolonged contact may cause conjunctivitis, ulceration and corneal abnormalities.
- **First Aid: Eyes**
 - Immediately flush eyes with large amounts of room temperature water, occasionally lifting the lower and upper lids, for at least 15 minutes. If symptoms persist after 15 minutes of irrigation, seek medical attention.
- **Potential Health Effects: Skin**
 - This product can cause irritation of the skin with pain, itching and redness. Severe overexposure can cause skin burns. Prolonged exposure may cause dermatitis and eczema.
- **First Aid: Skin**
 - Remove all contaminated clothing. For skin contact, wash thoroughly with soap and water for at least 20 minutes. Seek immediate medical attention if irritation develops or persists.
- **Potential Health Effects: Ingestion**
 - Harmful or fatal if swallowed. May cause gastrointestinal irritation with symptoms such as nausea, vomiting, and diarrhea. Ingestion may cause degeneration of liver, kidney, or renal failure. Persons who survive ingestion may develop granulomatous lesions of the kidney. Ingestion of large amounts may lead to convulsions, coma or death.
- **First Aid: Ingestion**
 - DO NOT INDUCE VOMITING. Have victim rinse mouth thoroughly with water, if conscious. Never give anything by mouth to a victim who is unconscious or having convulsions. Contact a physician or poison control center immediately.



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- **Potential Health Effects: Inhalation**

- May irritate the nose, throat and respiratory tract. Symptoms can include sore throat, coughing and shortness of breath. In severe cases, ulceration and perforation of the nasal septum can occur. If this material is heated, inhalation of fumes may lead to development of metal fume fever. This is a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness and cough. Repeated inhalation exposure can cause shrinking of the lining of the inner nose.

- **First Aid: Inhalation**

- Remove source of contamination or move victim to fresh air. Apply artificial respiration if the victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

- **First Aid: Notes to Physician**

- Provide general supportive measures and treat symptomatically. Basic Treatment: Establish a patent airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by non-rebreather mask at 10 to 15 L/minutes. Monitor for shock and treat if necessary. For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with normal saline during transport. Do not use emetics. For ingestion, rinse mouth and administer 5 mL/kg up to 200 mL of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. Administer activated charcoal. Advanced Treatment: Consider orotracheal or nontracheal intubation for airway control in the patient who is unconscious. Start an IV with lactated Ringer's SRP: "To keep open", minimal flow rate. Watch for signs of fluid overload. For hypotension with signs of hypovolemia, administer fluid cautiously. Consider vasopressors if hypotensive with a normal fluid volume. Watch for signs of fluid overload. Use proparacaine, hydrochloride to assist eye irrigation.



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Section 5: Firefighting Measures

- **General Fire Hazards**
 - Copper Sulfate Pentahydrate is not combustible, but may decompose in the heat of a fire to produce corrosive and/ or toxic fumes.
- **Hazardous Combustion Products**
 - Sulfur oxides and copper fumes.
- **Extinguishing Media**
 - Use methods for surrounding fire.
- **Fire Fighting Equipment/Instructions**
 - Firefighters should wear full protective clothing including self-contained breathing apparatus. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.
- **NFPA Ratings: Health:**
 - 2 Fire: 0 Reactivity: 1 Other: Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6: Accidental Release Measures

- **Personal Precautions:**
 - Wear protective gloves, goggles, and dust mask. Avoid generating dust.
- **Evacuation Procedures**
 - Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. Keep materials which can burn away from spilled material. In case of large spills, follow all facility emergency response procedures.
- **Environmental Precautions:**
 - Prevent spillage from entering water bodies.
- **Cleanup Methods:**
 - Sweep up material carefully. Avoid creating dust. Place in suitable container for disposal according to local regulations.
- **Special Procedures**
 - Remove soiled clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available



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Section 7: Handling and Storage

- **Handling Procedures**
 - Do not breathe dust. Avoid all contact with skin and eyes. Use this product only with adequate ventilation. Wash thoroughly after handling.
- **Storage Procedures**
 - Keep in original container in locked storage area. Keep container tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Storage areas should be made of fire-resistant materials. Post warning and “NO SMOKING” signs in storage and use areas, as appropriate. Use corrosion-resistant structural materials, lighting, and ventilation systems in the storage area. Floors should be sealed to prevent absorption of this material. Have appropriate extinguishing equipment in the storage area (i.e., sprinkler system, portable fire extinguishers). Empty containers may contain residual particulates; therefore, empty containers should be handled with care. Do not cut, grind, weld, or drill near this container. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Do not store this material in open or unlabeled containers. Limit the quantity of material stored. Store in suitable containers that are corrosion resistant

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

- **A: General Product Information** Follow the applicable exposure limits.
- **B: Component Exposure Limits** The exposure limits given are for Copper & Inorganic Compounds, as Cu (7440-50-8), Copper fume as Cu or Copper dusts and mists, as Cu.
 - **ACGIH:** 1 mg/m³ TWA (dusts & mists) 0.2 mg/m³ TWA (fume)
 - **OSHA:** 1 mg/m³ TWA (dusts & mists) 0.1 mg/m³ TWA (fume)
 - **NIOSH:** 1 mg/m³ TWA (dusts & mists) 0.1 mg/m³ TWA (fume)
 - **DFG MAKs:** 1 mg/m³ TWA Peak, 2•MAK 15 minutes, average value, 1-hr interval (copper and inorganic copper compounds) 0.1 mg/m³ TWA Peak, 2•MAK15 minutes, average value, 1-hr interval (fume)
- **Component Related Regulatory**
 - Information This product may be regulated, have exposure limits or other information identified as the following: Copper (7440-50-8) and inorganic



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compounds, as Cu, Copper (7440-50-8) dusts and mists, as Cu and Copper fume, Cu.

- **Engineering Controls**
 - Use mechanical ventilation such as dilution and local exhaust. Use a corrosion-resistant ventilation system and exhaust directly to the outside. Supply ample air replacement. Provide dust collectors with explosion vents.

PERSONAL PROTECTIVE EQUIPMENT

- **Personal Protective Equipment: Eyes/Face**
 - Wear safety glasses with side shields (or goggles) and a face shield, if this material is made into solution. If necessary, refer to U.S. OSHA 29 CFR 1910.133.
- **Personal Protective Equipment: Skin**
 - Wear chemically-impervious gloves, made of any waterproof material, boots and coveralls to avoid skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138. Personal
- **Protective Equipment: Respiratory**
 - If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998). The following NIOSH Guidelines for Copper dust and mists (as Cu) are presented for further information.
 - Up to 5 mg/m³ : Dust and mist respirator.
 - Up to 10 mg/m³ : Any dust and mist respirator except single-use and quarter mask respirators or any SAR.
 - Up to 25 mg/m³ : SAR operated in a continuous-flow mode or powered air-purifying respirator with a dust and mist filter(s).
 - Up to 50 mg/m³ : Air purifying, full-facepiece respirator with high-efficiency particulate filter(s), any powered air-purifying respirator with tight-fitting facepiece and high-efficiency particulate filter(s) or full-facepiece SCBA, or full-facepiece SAR.
 - Up to 100 mg/ m³ : Positive pressure, full-facepiece SAR.
 - Emergency or Planned Entry into Unknown Concentrations or IDLH Conditions: Positive pressure, full-facepiece SCBA, or positive pressure, full-facepiece SAR with an auxiliary positive pressure SCBA.

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- Escape: Full-facepiece respirator with high-efficiency particulate filter(s), or escape-type SCBA.
- NOTE: The IDLH concentration for Copper dusts and mists (as Cu) is 100 mg/m³
- **Personal Protective Equipment: General**
 - Wash hands thoroughly after handling material. Do not eat, drink or smoke in work areas. Have a safety shower or eye-wash fountain available. Use good hygiene practices when handling this material including changing and laundering work clothing after use. Discard contaminated shoes and leather goods.

Section 9: Physical and Chemical Properties

Physical Properties: Additional Information The data provided in this section are to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

Appearance:	Blue crystals or powder	Odor:	Odorless
Physical State:	Solid	pH:	3.7-4.2 (10% soln.)
Vapor Pressure:	20 torr at 22.5 deg C	Vapor Density:	8.6
Boiling Point:	560 deg C (1040 deg F) [decomposes]	Freezing/Melting Point:	150 deg C (302 deg F)
Solubility (H₂O):	31.6 g/100 cc (@ 0 deg C)	Specific Gravity:	2.28 @ 15.6 deg C (H ₂ O = 1)
Softening Point:	Not available	Particle Size:	Various
Molecular Weight:	249.68	Bulk Density:	Not available
Flash Point:	Not flammable	Chemical Formula:	CuSO ₄ *5H ₂ O
Upper Flammable Limit (UEL):	Not applicable	Lower Flammable Limit (LEL):	Not applicable
Auto Ignition:	Not applicable	Flammability Classification:	Not applicable
Rate of Burning:	Not applicable		

Section 10: Stability and Reactivity

- **Chemical Stability**
 - Copper Sulfate Pentahydrate is hygroscopic, but stable when kept dry, under normal temperature and pressures.
- **Chemical Stability: Conditions to Avoid**
 - Avoid high temperatures, exposure to air and incompatible materials.
- **Incompatibility**
 - Copper Sulfate causes hydroxylamine to ignite and the hydrated salt is vigorously reduced. Solutions of sodium hypobromite are decomposed by powerful catalytic action of cupric ions, even as impurities. Copper salts, including Copper Sulfate may react to form explosive acetylides when in contact with acetylene or nitromethane. Contact with reducing agents, can cause a vigorous reaction, especially in solution. This product can corrode aluminum, steel and iron. Copper Sulfate Pentahydrate is incompatible with magnesium, strong bases, alkalines, phosphates, acetylene, hydrazine, and zirconium.
- **Hazardous Decomposition**
 - Sulfur oxides and Copper oxides.
- **Hazardous Polymerization**
 - Will not occur.

Section 11: Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

- Acute toxicity is primarily due to corrosive (acidic) properties. The product is harmful or fatal if swallowed.
- It is an eye and skin irritant, potentially causing burns. Inhalation may irritate the respiratory tract, leading to symptoms like nose irritation, sore throat, coughing, chest tightness, and possible nasal septum damage.
- Chronic exposure may result in dermatitis, eczema, conjunctivitis, corneal abnormalities, liver and kidney damage, anemia, and other blood cell issues.

B: Component Analysis - LD50/LC50

Copper Sulfate Pentahydrate (7758-99-8):

- Oral-rat LD50 = 330 mg/kg (testing done June 2006, Consumer Product Testing Co., Inc.); Intraperitoneal-Rat LD50: 18,700 mg/kg; Intraperitoneal-rat LD50: 20 mg/kg; Subcutaneous-rat LD50: 43 mg/kg; Intravenous-rat LD50: 48900 µg/kg; Unreported-rat LD50: 520 mg/kg; Oral-mouse LD50: 369 mg/kg; Intraperitoneal-Mouse LD50: 33

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mg/kg; Intraperitoneal-mouse LD50: 7182 µg/kg; Intravenous-mouse LD50: 23300 µg/kg

Carcinogenicity

A: General Product Information

- Copper Sulfate Pentahydrate (7758-99-8): Cytogenetic analysis in rats at 300 mg/kg.

B: Component Carcinogenicity

- Copper dusts and mists, as Cu (7440-50-8):
 - EPA classification: EPA-D (Not classifiable as to human carcinogenicity due to inadequate evidence or no data available).

Epidemiology

- No information available.

Neurotoxicity

- Has not been identified.

Mutagenicity

- Human and animal mutation data for Copper Sulfate Pentahydrate were obtained during clinical studies on tissues exposed to high doses.

Teratogenicity

- No reports of teratogenicity in humans, but animal studies show copper deficiency or excess can harm embryos. Industrial exposure is unlikely to result in toxic levels due to limited copper absorption.

Other Toxicological Information

- Individuals with Wilson's disease may be more susceptible to overexposure effects as they cannot metabolize copper.

Section 12: Ecological Information

Ecotoxicity

- **A: General Product Information**
 - Harmful to aquatic life in very low concentrations. Copper Sulfate Pentahydrate is toxic to fish and marine organisms when applied to streams, rivers, ponds, or lakes.
- **B: Ecotoxicity**
 - If released to soil, copper sulfate may leach to groundwater, be partly oxidized, or bind to humic materials, clay, or hydrous oxides of iron and manganese. In water, it will bind to carbonates as well as humic materials, clay, and hydrous oxides of iron and manganese. Copper is accumulated by plants and animals, but it does not

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appear to biomagnify from plants to animals. In air, copper aerosols have a residence time of 2 to 10 days in an unpolluted atmosphere and 0.1 to greater than 4 days in polluted, urban areas.

- LC50 (*Lepomis machochirus* bluegill) wt 1.5 g = 884 µg/L at 18°C, static bioassay (95% confidence limit 707-1,100 µg/L) (technical material, 100% (about 25% elemental copper); LC50 (*Leopmis cyanellus*, Green Sunfish) = 1.1 g, 3,510 µg/L at 18°C; LC50 (*Pimephales promelas*, Fat-head minnow) = 1.2 g, 838 µg/L at 18°C; LC50 (*Crassius auratus*, Goldfish) = 0.9 g, 1380 µg/L at 18°C; LC50 (*Crassius auratus*, Goldfish) = 0.1-2.5 mg/L; LC50 (EEL) = 0.1-2.5 mg/L; LC50 (*Salmo gairdneri*, Rainbow trout) = 1.6 g, 135 µg/L at 18°C; LC50 (*Salmo gairdneri*, Rainbow trout) 48 hours = 0.14 ppm; LC50 (*Daphnia magna*) no time specified = 0.182 mg/L; LC50 (*Salmo gairdneri*, Rainbow trout) no time specified = 0.17 mg/L; LC50 (*Lepomis machochirus*, Blue gill) no time specified = 1.5 g, 884 µg/L at 18°C; LC50 (Stripped Bass) 96 hours = 1 ppm or lower; LC50 (Prawn) 48 hours = 0.14; LC50 (Shrimp) 96 hours = 17.0 ppm copper; LC50 (Blue Crab) 96 hours = 28 ppm copper; LC50 (Oyster) 96 hours = 5.8 ppm copper; LC50 (*Viviparus bengalensis* snail) 96 hours = 0.060 ppm copper (at 32.5°C; 0.066 ppm copper static bioassay); LC50 (*Viviparus bengalensis* snail) 96 hours = 0.09 ppm copper (at 27.3°C; 0.066 ppm copper static bioassay); LC50 (*Viviparus bengalensis* snail) 96 hours = 0.39 ppm copper (at 20.3°C; 0.066 ppm copper static bioassay).

Section 13: Disposal Considerations

US EPA Waste Number & Descriptions

- **A: General Product Information**
 - This product is a registered pesticide.
- **B: Component Waste Numbers**
 - No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

- All wastes must be handled in accordance with local, state, and federal regulations or with regulations of Canada and its Provinces. This material can be converted to a less hazardous material using weak reducing agents followed by neutralization. Do not reuse empty containers or rinse them unless required for recycling. If partly filled, contact the local solid waste agency for disposal instructions. Never pour unused product down drains or on the ground.

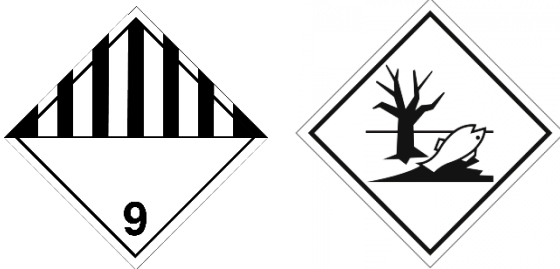
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Section 14: Transport Information

Note

- The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

US DOT 49 CFR 100-185 (Revised April 24, 2017)



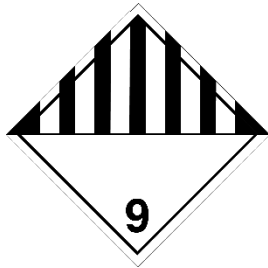
- **Shipping Details:**
 - UN/NA #: UN 3077
 - Shipping Name: Environmentally Hazardous Substance, solid, n.o.s. (cupric sulfate)
 - Hazard Class: 9
 - Packing Group: III
 - Required Label(s): Class 9.
- **Special Provision and Packaging:**
 - **Special Provision:** 8, 146, 335, A112, B54, IB8, IP2, N20, T1, TP33;
 - Packaging: 172.155, 172.213.
- **RQ and Marking:**
 - **RQ Quantity:** For a single package, less than the RQ of 10lb (4.54 kg), the RQ designation should not be used.
 - **Marking:** MARINE POLLUTANT. Marine Pollutant when shipping ground greater than 882 pounds' single container or any quantity by water.

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58th Edition International Air Transport Association (IATA)

Applies to air shipments within the U.S. and international shipments originating in the U.S.

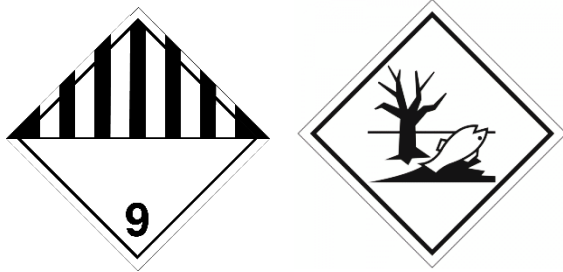


- **Shipping Details:**
 - UN/NA #: UN 3077
 - Proper Shipping Name: Environmentally Hazardous Substance, solid, n.o.s. (cupric sulfate)
 - Hazard Class: 9 (Miscellaneous Dangerous Goods)
 - Packing Group: III
- **Passenger & Cargo Aircraft:**
 - Packing Instruction: 956
 - Maximum Net Quantity: 400 kg
 - Limited Quantity Packing Instruction: Y956
 - Limited Quantity Maximum Net Quantity: 30 kg
- **Excepted Quantities:**
 - Code: E1
 - Maximum Inner Package: 30 g
 - Maximum Outer Package: 1 kg
- **Cargo Aircraft Only:**
 - Packing Instruction: 956
 - Maximum Net Quantity: 400 kg
- **Special Provisions and ERG:**
 - A97, A158, A179, A197; ERG: 9L

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Amendment 38-16 International Maritime Dangerous Goods (IMDG) Code:
Applies to shipments via marine vessel transport.



- **Shipping Details:**
 - UN/NA #: UN 3077
 - Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cupric sulfate)
 - Hazard Class: 9
 - Packing Group: III
- **Special Provisions and Packaging:**
 - Special Provisions: 274, 335, 966, 967
 - Packing Instructions: P002/LP02
 - Provisions: PP12
 - Limited Quantities: 5 kg
 - Excepted Quantities: E1
- **IBC and EmS:**
 - IBC Instructions: IBC08
 - IBC Provisions: B2
 - EmS: F-A, S-F
- **Stowage, Handling, and Segregation:**
 - Stowage and Handling: Category A, SW23
 - Segregation: None
- **Marine Pollutant:**
 - This material is considered a marine pollutant by the IMO. Shipments must carry the new marking. Refer to IMO Amendment 36-12 Chapter 2.9 and 2.10.



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Section 15: Regulatory Information

US Federal Regulations:

- **General Product Information:**
Copper Sulfate Pentahydrate (CAS # 7758-99-8) is listed as a Priority and Toxic Pollutant under the Clean Water Act.
- **Component Analysis:**
 - This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), and/or CERCLA (40 CFR 302.4):
 - Copper Compounds (7440-50-8):
 - SARA 313: final RQ = 5000 pounds (2270 kg)
 - Note: No reporting of releases of this substance is required if the diameter of the pieces of the solid metal released is equal to or greater than 0.004 inches.
 - Cupric Sulfate (7758-98-7):
 - CERCLA: final RQ = 10 pounds (4.54 kg)
- **Sara 311/312 Tier II Hazard Ratings:**
 - **Component:** Copper Sulfate Pentahydrate (CAS # 7758-99-8)
 - **Fire Hazard:** No
 - **Reactivity Hazard:** No
 - **Pressure Hazard:** No
 - **Immediate Health Hazard:** Yes
 - **Chronic Health Hazard:** Yes

State Regulations:

- **General Product Information:**
 - California Proposition 65: Copper Sulfate Pentahydrate is not on the California Proposition 65 chemical lists.
- **Component Analysis - State:**
 - The following components appear on one or more state hazardous substance lists:
 - Copper (7440-50-8): CA: Yes; FL: No; MA: Yes; MN: No; NJ: Yes; PA: Yes
 - Copper, fume, dust, and mists: CA: No; FL: Yes; MA: No; MN: Yes; NJ: No; PA: Yes
 - Copper Sulfate Pentahydrate (7758-99-8): CA: No; FL: No; MA: No; MN: No; NJ: Yes; PA: Yes



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Other Regulations:

- **General Product Information:**
 - When used as a pesticide, the requirements of the U.S. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), or requirements under the Canadian Pest Control Act, are applicable.
- **Component Analysis - Inventory:**
 - **Component:** Copper Sulfate Pentahydrate (CAS # 7758-99-8)
 - TSCA: Excepted
 - DSL: No
 - EINECS: Yes
 - Note: This compound is not on the TSCA Inventory but is excepted as a hydrate of a listed compound, Copper Sulfate (CAS # 7758-98-7), per 40 CFR 710.4 (d)(3) and 40 CFR 720.30 (h)(3). Under TSCA, any chemical substance that is a hydrate of a listed compound is excepted.
- **Component Analysis - WHMIS IDL:**
 - The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:
 - Copper Sulfate Pentahydrate (CAS # 7758-99-8): Minimum Concentration: 1 percent

SECTION 16: Other Information

Date of Preparation: December 18, 2024

Revision Number: 1

Other Information:

ANSI Labeling (Z129.1):

- **Warning:** MAY BE HARMFUL OR FATAL IF SWALLOWED. CAUSES SKIN AND EYE IRRITATION. HARMFUL IF INHALED.
- **Precautionary Statements:** Keep from contact with clothing. Do not taste or swallow. Do not get on skin or in eyes. Avoid breathing dusts or particulates. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wear gloves, goggles, face shields, suitable body protection, and NIOSH-approved respiratory protection, as appropriate.



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First-Aid:

- **In Case of Contamination of Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
- **In Case of Contamination of Eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue to rinse.
- **If Inhaled:** Move person to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth.
- **If Ingested:** Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
- **Poison Control Contact:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergencies, contact The National Pesticide Information Center at 1-800-858-7378.

In Case of Fire: Use water fog, dry chemical, CO₂, or "alcohol" foam.

In Case of Spill: Absorb spill with inert material. Place residue in suitable container. Consult Material Safety Data Sheet for additional information.

Disclaimer:

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