

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064 (800) 955-1177
Emergency Number: (800) 255-3924

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: S25279B, S25279C
Product Identity: Cupric Chloride Dihydrate

Chemical Family: Not Applicable
Synonyms: Copper (II) Chloride, Dihydrate
Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): Chemtel (800) 255-3924

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Section 2 – Hazard Identification

Emergency Overview: Causes eye, skin, and respiratory tract irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Hygroscopic

Appearance: blue/green solid **Odor:** Odorless

Target Organs: Respiratory system, eyes, skin.

Potential Health Effects/ Routes of Exposure:

Eyes: May cause irritation

Skin: May cause irritation.

Ingestion May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Causes respiratory tract irritation.

Chronic Effect / Carcinogenicity: Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed. Individuals with Wilson's disease are unable to metabolize copper. Thus, copper accumulates in various tissues and may result in liver, kidney, and brain damage.

Aggravated Medical Conditions: No information available

These chemicals are not considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Copper(II) chloride dihydrate, CAS# 10125-13-0

Section 4 – First Aid

Eyes: Flush eyes with water for at least 15 minutes. Get medical assistance.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately.

Ingestion: DO NOT induce vomiting. Dilute with milk or water. Get medical aid immediately. Call a poison control center.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Get medical aid. DO NOT use mouth-to-mouth resuscitation. Use artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable **Autoignition Temperature** No information available.
Explosion Limits Upper No data available **Lower** No data available
Extinguishing Media: Use means suitable to extinguishing surrounding fire.
Unsuitable Extinguishing Media: No information available
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.
Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.
Hazardous Combustion Products: No information Available
Sensitivity to mechanical impact No information available.
Sensitivity to static discharge No information available.
Specific Hazards Arising from the Chemical: No information available
NFPA Rating: (estimated) Health: 2; Flammable: 0; Reactivity: 1

Section 6 – Accidental Release Measures

Personal Precautions: Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental Precautions: Not relevant considering the small amounts used.
Methods for Containment and Clean: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions

Section 7 – Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Do not ingest or inhale. Handle under an inert atmosphere. Store protected from air.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 – Exposure Controls, Personal Protection

Copper(II) chloride dihydrate, CAS# 10125-13-0, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Local/general exhaust is recommended. Ensure eyewash and safety showers are available.
Personal Protection Equipment: **Skin Protection:** Chemical resistant gloves.
Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

Section 9 – Physical and Chemical Properties

Appearance/Physical State: blue/green solid	% Volatility: No Information Available
Odor: Odorless	Specific Gravity: 2.51 g/mL @ 20°C
Boiling Point: 993°C	Vapor Pressure: NA
Melting Point: 100°C	Flash Point: Not Applicable
Vapor Density: Not Available	Coefficient of water/oil distribution: Not Available
Evaporation Rate: No Information Available	Odor Threshold: Not Available
pH: 3 - 3.8 (5% aq.sol.)	Decomposition Temperature: Not Available
Flammability: No Information Available	Partition Coefficient n-octanol/water: No data
Solubility: Soluble available	
Relative Density: No Information Available	Molecular Weight: 170.4788

Section 10 – Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Incompatible Materials: Aqueous solution of copper(2+) sulfate is an acid. Incompatible with strong bases, hydroxylamine, magnesium.

Conditions to Avoid: High temperatures, dust generation, exposure to moist air or water.

Hazardous Decomposition Products: Oxides of sulfur, copper fumes.

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat NA mg/kg; LC50 inhalation-rat: NA

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity No Information available

Sensitization No information available.

Mutagenic: No Information available

Reproductive Effects: No Information available

Developmental Effects (Immediate/Delayed) No information available.

Teratogenicity No information available.

Other Adverse Effects No Information Available.

Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: No Information available

Persistence and Degradability: No Information Available

Mobility: No Information Available

Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Section 14 – Transport Information

DOT – UN2802, COPPER CHLORIDE, 8, III

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.

Canada DSL: Not Applicable

TSCA: Not Applicable

SARA Title III Section 313: Not Applicable

RCRA Status: Not Applicable

CERCLA Reportable Quantity: Not Applicable

WHMIS: D1B, E

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.

