

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

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Cupric Chloride, Anhydrous

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Cupric Chloride, Anhydrous

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25281

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Acute toxicity (oral, dermal, inhalation), category 4
Skin irritation, category 2



Corrosive

Serious eye damage, category 1



Environmentally Damaging

Acute hazards to the aquatic environment, category 1
Chronic hazards to the aquatic environment, category 2

Acute Oral Tox. 4
Acute Dermal Tox. 4
Skin Irrit. 2
Eye corr. 1
Aquatic Acute 1
Aquatic Chronic 2

Signal word :Danger

Hazard statements:

Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye damage
Very toxic to aquatic life
Toxic to aquatic life with long lasting effects

Precautionary statements:

If medical advice is needed, have product container or label at hand

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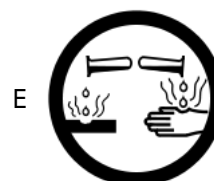
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Keep out of reach of children
Read label before use
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
IF ON SKIN: Wash with soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
Continue rinsing
Immediately call a POISON CENTER or doctor/physician
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Collect spillage
Dispose of contents and container to an approved waste disposal plant

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:

CAS 7447-39-4	Copper(II) chloride, anhydrous	100 %
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Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other

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symptoms appear.

After skin contact: Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact: Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.

After swallowing: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Gastrointestinal disturbance, Lowered blood pressure, Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue. Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use means suitable to extinguishing surrounding fire.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational. Avoid contact with skin, eyes and clothing.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use

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personal products when handling chemical substances. Avoid dust generation.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials. Keep in a dry place.

SECTION 8 : Exposure controls/personal protection



Control Parameters:

7447-39-4 , Copper dichloride, NIOSH PEL TWA 1 mg/m³

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before reusing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Yellow/brown solid	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Odorless	Vapor pressure:	Not Determined
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	Not Determined	Relative density:	3.386 g/mL at 25 °C (77 °F)
Melting/Freezing point:	620 °C (1,148 °F)	Solubilities:	Soluble in Water
Boiling point/Boiling range:	993 °C (1,819 °F) at 1,013.250 hPa (760.000 mmHg)	Partition coefficient (n-octanol/water):	Not Determined

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Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Not Determined	Viscosity:	a. Kinematic:Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity:Nonreactive under normal conditions.

Chemical stability:Stable under normal conditions.

Possible hazardous reactions:None under normal processing.

Conditions to avoid:Incompatible materials.Dust generation.excess heat.exposure to moist air or water.

Incompatible materials:moisture.Alkali metals. potassium. Sodium. nitromethane. hydrazine. sodium hypobromite

Hazardous decomposition products:Hydrogen chloride

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	7447-39-4 (Cupric Chloride)	LD50 Rat: 584 mg/kg
Dermal:	7447-39-4 (Cupric Chloride)	LD50 Rat: 1,224 mg/kg
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Ocular:	7447-39-4 (Cupric Chloride)	Rabbit: Corrosive to eyes
Dermal:	7447-39-4 (Cupric Chloride)	Rabbit: irritating to skin
Sensitization:	guinea pig - Does not cause skin sensitisation.	
Single Target Organ (STOT):	No additional information.	
Numerical Measures:	No additional information.	
Carcinogenicity:	Not listed as a carcinogen (ACGIH, IARC, NTP): 7447-39-4 (Cupric Chloride)	
Mutagenicity:	Mutagenic effects have occurred in experimental animals	
Reproductive Toxicity:	Adverse reproductive effects have occurred in experimental animals.	

SECTION 12 : Ecological information

Ecotoxicity

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Fish mortality LC50 - Cyprinus carpio (Carp) - 0.12 - 0.23 mg/l - 96.0 h: 7447-39-4 (Cupric Chloride)

Algae EC50 - Chlorella vulgaris (Fresh water algae) - 0.2 mg/l - 96 h: 7447-39-4 (Cupric Chloride)

Invertebrates: Immobilization EC50 - Daphnia magna (Water flea) - 0.04 mg/l - 48 h: 7447-39-4 (Cupric Chloride)

Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

2802

UN proper shipping name

Copper Chloride

Transport hazard class(es)



Class:

8 Corrosive substances

Packing group: III

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

7447-39-4 Copper dichloride

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7447-39-4 Copper chloride 10 lb

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Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: . The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

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