



Material Safety Data Sheet

Catalog Number: 152515
Revision date: 24-Apr-2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 152515

Product name: CUPROUS CHLORIDE ACS REAGENT GRADE

Synonyms: Copper (I) Chloride; Copper Monochloride; Cuprous Dichloride; Dicopper Dichloride

Supplier:

MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
CUPROUS CHLORIDE	7758-89-6	90 - 100%	0.2 mg/m ³ TWA (fume); 1 mg/m ³ TWA (dusts and mists)	0.1 mg/m ³ TWA (fume); 1 mg/m ³ TWA (dusts and mists)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful by inhalation, in contact with skin and if swallowed., Harmful to flora, fauna, soil organisms and aquatic organisms.

Category of Danger:

Harmful , Dangerous for the environment

Principle routes of exposure: Skin

Inhalation: Harmful by inhalation.

Ingestion: Harmful if swallowed.

Skin contact: Harmful in contact with skin.

Eye contact: Risk of serious damage to eyes

Statements of hazard HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

Statement of First Aid If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

Precautions - ANSI Label Do not taste or swallow. Wash thoroughly after handling.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO₂, water spray or "alcohol" foam

Specific hazards:

Burning produces irritant fumes.

Unusual hazards:

None known

Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific methods:

Water mist may be used to cool closed containers.

Flash point:

Not determined

Autoignition temperature:

Not determined

NFPA rating:

NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment.

Environmental precautions:

Prevent product from entering drains.

Methods for cleaning up:

Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Storage:

ROOM TEMPERATURE
DESICCATE
PROTECT FROM LIGHT

Handling:

Use only in area provided with appropriate exhaust ventilation.

Safe handling advice:

Wear personal protective equipment.

Technical measures/storage conditions:

Keep containers tightly closed in a cool, well-ventilated place.

Incompatible products:

Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor	Reddish, lustrous; odorless
Physical state:	Solid
Formula:	Cu
Molecular weight:	63.55
Melting point/range:	1083 °C
Boiling point/range:	2567 °C at 1013 hPa
Density:	8.89 g/cm ³ at 20 °C
Vapor pressure:	0 hPa at 1400 °C
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	Insoluble
Flash point:	Not determined
Autoignition temperature:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides.
Materials to avoid:	-
	Forms shock-sensitive compounds with acetylene. Incompatible with acids. Violent reaction if finely divided material comes in contact with strong oxidizers.
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components
CUPROUS CHLORIDE

RTECS Number:
GL6990000

Selected LD50s and LC50s

Inhalation LC50 Mouse : 1008 mg/m³
Oral LD50 Rat : 140 mg/kg
Oral LD50 Mouse : 347 mg/kg

Chronic toxicity:	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
Local effects:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Specific effects:	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
Primary irritation:	No data is available on the product itself.
Carcinogenic effects:	No data is available on the product itself.
Mutagenic effects:	No data is available on the product itself.
Reproductive toxicity:	No data is available on the product itself.

Components
CUPROUS CHLORIDE

NIOSH - Health Effects
Upper respiratory irritation

NIOSH - Target Organs
dusts and mists: respiratory system, skin, liver, kidneys, eyes (increased risk with Wilson's disease); fume: respiratory system, skin, eyes, (increased risk with Wilson's disease)

12. ECOLOGICAL INFORMATION

Mobility:
Bioaccumulation:
Ecotoxicity effects:
Aquatic toxicity:

No data available
No data available
No data available
May cause long-term adverse effects in the aquatic environment.

Components
CUPROUS CHLORIDE

U.S. DOT - Appendix B - Marine Pollutan
Not Listed

U.S. DOT - Appendix B - Severe Marine Pollutants
DOT regulated severe marine pollutant

United Kingdom - The Red List:
Not Listed

Components
CUPROUS CHLORIDE

Germany VCI (WGK)
2

World Health Organization (WHO) - Drinking Water
2 mg/L (Provisional)

Ecotoxicity - Fish Species Data
LC50 (96 hr) fathead minnow:23 ug/L;20 mg CaCO3/L;LC50 (96 hr) rainbow trout:13.8 ug/L;juveniles;LC50 (96 hr) bluegill:236 - 892 ug/L:adults

Components
CUPROUS CHLORIDE

Ecotoxicity - Freshwater Algae Data
IC50 (72 hr) freshwater algae (Scenedesmus subspicatus):120 ug/L:

Ecotoxicity - Microtox Data
Not Listed

Ecotoxicity - Water Flea Data
LC50 (96 hr) water flea:10 ug/L;Cond: 45 mg CaCO3/L;LC50 (96 hr) water flea:200 ug/L;Cond: 226 mg CaCO3/L

Components
CUPROUS CHLORIDE

EPA - ATSDR Priority List
Rank (of 275): 124

EPA - HPV Challenge Program Chemical List
Not Listed

California - Priority Toxic Pollutants
Maximum concentration = 13 ug/L; continuous concentration = 9.0 ug/L

Components
CUPROUS CHLORIDE

California - Priority Toxic Pollutants
Water and organisms = 1300 ug/L

California - Priority Toxic Pollutants
Maximum concentration = 4.6 ug/L; continuous concentration = 3.1 ug/L

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.
Do not re-use empty containers

Contaminated packaging:
Catalog Number: 152515

Product name: CUPROUS CHLORIDE ACS
REAGENT GRADE

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14. TRANSPORT INFORMATION

UN/Id No: 2802

DOT:

Proper shipping name: Copper Chloride, Corrosive
IATA Hazard Label(s): Corrosive
Hazard Class: 8 -
 Corrosive materials
Packing group: III

Emergency Response Guide Number (ERG): 154

Components

CUPROUS CHLORIDE

U.S. DOT - Appendix A Table 1 - Reportable Quantities

RQ = 5000 pounds (2270 kg); The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

TDG (Canada):

WHMIS hazard class: D2b toxic materials

**IMDG/IMO**

Proper shipping name: Copper Chloride, Corrosive

IMDG - Hazard Classifications: Not Applicable

Components

CUPROUS CHLORIDE

U.S. DOT - Appendix B - Marine Pollutants **U.S. DOT - Appendix B - Severe Marine Pollutants**

Not Listed

DOT regulated severe marine pollutant

IMO-labels:

15. REGULATORY INFORMATION

International Inventories**Components**

CUPROUS CHLORIDE

Inventory - United States TSCA - Sect. 8(b)

Present

Canada DSL Inventory List -

Present

Australia (AICS):

Present

Inventory - China:

Present

EU EINECS List -

231-159-6; Cu

Inventory - Japan:

1-210

Korean KECL:

KE-08896

Philippines PICCS:

Present

U.S. regulations:**Components**

CUPROUS CHLORIDE

California Proposition 65 -	Massachusetts Right to Know List: [present]	New Jersey Right to Know List: sn 0528	Pennsylvania Right to Know List: environmental hazard (any compound of this substance is also an environmental hazard as well as dust and fume)
Not Listed			

Components

CUPROUS CHLORIDE

Florida substance List: [present] (includes fume, dust, and mist)	Rhode Island Right to Know List: Toxic	Illinois - Toxic Air Contaminants Present on Great Waters or Great Lakes list	Connecticut - Hazardous Air Pollutants 20 ug/m ³ HLV (dust and mists, as Cu); 2 ug/m ³ HLV (fume)
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Components

CUPROUS CHLORIDE

SARA 313 Emission reporting/Toxic Release of Chemicals form R reporting required for 1.0% de minimis concentration	CERCLA/SARA - Section 302 Extremely Haz Not Listed	NTP: None	IARC: None
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SARA 313 Notification:

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION**Prepared by:** Health & Safety

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End of Safety Data Sheet