




**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. CC 510  
Effective Date February 16, 1999

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	CUPRIC CHLORIDE, ANHYDROUS	 <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4</p> <p>HMIS* Health 2 Fire 0 Reactivity 1</p>
Chemical Synonyms	Copper (II) Chloride, Anhydrous	
Formula	CuCl <sub>2</sub>	
Unit Size	up to 2.5 Kg.	
C.A.S. No.	7447-39-4	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Copper (II) Chloride, Anhydrous	100%	See Section V.

**WARNING! CORROSIVE! IRRITANT TO SKIN, EYES AND MUCOUS**

**MEMBRANES. HARMFUL IF SWALLOWED OR INHALED.**

## SECTION III PHYSICAL DATA

Melting Point (°F)	498°C (928°F)	Specific Gravity (H <sub>2</sub> O = 1)	3.386 at 20°C
Boiling Point (°F)	Not applicable.	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	Data not listed.	Evaporation Rate ( =1)	Not applicable.
Vapor Density (Air=1)	Not applicable.		
Solubility in Water	70.6 grams per 100 mL. water @ 20°C.		
Appearance & Odor	Yellow to brown crystalline powder; no odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

## SPECIAL FIREFIGHTING PROCEDURES

This material will not burn. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 154)

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Combustion may produce irritating copper fumes and toxic fumes of hydrogen chloride and chlorine. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.

## SECTION V HEALTH HAZARD DATA

CC 510

### Threshold Limited Value

Toxicity data: orl-rat LD50: 584 mg/kg. (Air) As copper metal:  
1.0 mg/m<sup>3</sup> for 8 hr. working day. Copper (fume) TWA 0.2 mg/m<sup>3</sup>.

### Effects of Overexposure

**TARGET ORGANS AFFECTED:** Respiratory system, skin, liver, kidneys.

**INGESTION:** Copper salts impart a metallic taste in mouth. May cause gastrointestinal irritation and vomiting. May be fatal if swallowed. **EYES:** Corrosive; causes conjunctivitis. **SKIN:** Irritating to skin, may cause allergic reaction. **INHALATION:** Causes upper respiratory irritation, headache, dizziness, nausea and incoordination.

### Emergency and First Aid Procedures

**INGESTION:** If swallowed, do **NOT** induce vomiting. If conscious, give two glasses of milk or water to drink. Call physician immediately. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water, lifting upper and lower eyelids occasionally. Get medical attention. **INHALATION:** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

## SECTION VI REACTIVITY DATA

Stability	Unstable	Stable	Conditions to Avoid
		X	Excessive moisture and heat.

Incompatibility (Materials to Avoid)	Water, potassium, sodium and ammonia vapors. Corrosive to aluminum.
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Hazardous Decomposition Products	Decomposes at high temperatures to form hydrogen chloride and copper oxide.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X

## SECTION VII SPILL OR LEAK PROCEDURES

### Steps to be taken in case material is released or spilled

Sprinkle lime or soda ash on spill to form insoluble copper salt. Sweep up and place in a suitable container for proper disposal. Avoid contaminating public water.

### Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved chemical landfill or contract with a licensed chemical waste disposal agency.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** None should be needed in normal laboratory handling. If dusty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Goggles, smock, apron, vented hood, proper gloves and eye wash station.
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## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store below 50°C, in a cool, dry place away from acids. This material is very hygroscopic. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

**Other Precautions** Read label on container before using. Do not wear contact lenses when working with chemicals. Hygroscopic material, protect from moisture. Wash contaminated clothing before reuse.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 6	Date 2/16/99	Approved Michael Raszeja	Chemical Safety Coordinator MR
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D.O.T. COPPER CHLORIDE, 8, UN 2802, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20