



**ALDON
CORPORATION**

MATERIAL SAFETY DATA SHEET

1533 W.Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. CC 500
Effective Date February 16, 1999

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	CUPRIC CHLORIDE, DIHYDRATE
Chemical Synonyms	Copper (II) Chloride, Dihydrate
Formula	$\text{CuCl}_2 \cdot 2\text{H}_2\text{O}$
Unit Size	up to 2.5 Kg.
C.A.S. No.	10125-13-0

0

2

1

CHEMTREC
800-424-9300
Day 716-226-6177

NFPA
HAZARD RATING
LEAST SLIGHT MODERATE
0 1 2

Health 2
Fire 0
Reactivity 1

HMIS *
HIGH EXTREME
3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Cupric Chloride, Dihydrate	>98%	See Section V.
DANGER! CORROSIVE! MAY BE FATAL IF SWALLOWED. HYGROSCOPIC.		
CAUSES EYE, SKIN AND GASTROINTESTINAL IRRITATION.		

SECTION III PHYSICAL DATA

Melting Point (°F)	110°C (230°F) @ 760 mm Hg	Specific Gravity ($\text{H}_2\text{O} = 1$)	2.51
Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (=1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Freely soluble.		
Appearance & Odor	Green to blue crystalline powder; no odor (nasal irritant).		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use any media suitable for surrounding fire conditions.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing to prevent eye and skin contact. Avoid flushing to sewer or stream if possible. Toxic to aquatic life.

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

UNUSUAL FIRE AND EXPLOSION HAZARDS

If involved in fire, copper fumes, toxic fumes of hydrogen chloride gas and chlorine will be produced. Can react vigorously with oxidizing materials.

SECTION V HEALTH HAZARD DATA

CC 500

Threshold Limited Value

(Air) As copper dust: TWA: 1.0 mg/m³
Copper (fume) TWA: 0.2 mg/m³ (ACGIH 1992-93)

Effects of Overexposure

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

INGESTION: Copper salts impart a metallic taste in the mouth. May cause gastrointestinal irritation and vomiting. This product may be fatal if swallowed. **INHALATION:** Excessive inhalation of this material causes headaches, dizziness, nausea and incoordination. **EYES:** This product is an irritant. May cause conjunctivitis or ulceration and turbidity of the cornea. **SKIN:** May cause irritation.

Emergency and First Aid Procedures

INGESTION: DO NOT induce vomiting. If conscious, give large amounts of water. Seek medical attention 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 for at least 20 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **INHALATION:** Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable Stable	Conditions to Avoid	Excessive moisture and heat may cause decomposition.
Incompatibility (Materials to Avoid)	Potassium, sodium and ammonia vapors. Corrosive to aluminum.		
Hazardous Decomposition Products	Decomposes at high temperatures to form hydrogen chloride and copper oxide.		
Hazardous Polymerization	May Occur Will Not Occur	Conditions to Avoid	Not applicable.
	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 material and place in a suitable container for disposal. Wash spill area with soap and water. 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 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.			
Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.
Protective Gloves	Rubber.		Eye Protection	Chemical safety goggles.
Other Protective Equipment	Safety goggles, smock, coveralls, boots, apron, vented hood, proper gloves, safety shower and eye wash station.			

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.

Efflorescent in dry air. Deliquescent in moist air. Avoid breathing dust. Use with adequate ventilation. Wash contaminated clothing before reuse.

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

Revision No. 7	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