



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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

MSDS No. CC 507
Effective Date February 16, 1999

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	CUPRIC CHLORIDE 1 MOLAR SOLUTION	 <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS *</p> <table border="1"> <tr> <td>Health</td> <td>2</td> </tr> <tr> <td>Fire</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4	Health	2	Fire	0	Reactivity	1
LEAST	SLIGHT		MODERATE	HIGH	EXTREME													
0	1		2	3	4													
Health	2																	
Fire	0																	
Reactivity	1																	
Chemical Synonyms	Copper (II) Chloride Aqueous Solution																	
Formula	Mixture																	
Unit Size	up to 4 Lt																	
C.A.S. No.	Mixture. See section II.																	

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Copper (II) Chloride: CAS No. 7447-39-4	13.5%	See Section V.
Water: CAS No. 7732-18-5	86.5%	None established.
WARNING! CORROSIVE! IRRITANT TO SKIN, EYES AND MUCOUS		
MEMBRANES. HARMFUL IF SWALLOWED		

SECTION III PHYSICAL DATA

Melting Point (°F)	Approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
Boiling Point (°F)	100°C (212°F)	Percent Volatile by Volume (%)	86.5%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (water = 1)	< 1
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete		
Appearance & Odor	Clear, light blue water like liquid; 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	In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.
(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 154)	

UNUSUAL FIRE AND EXPLOSION HAZARDS	In fire conditions resulting in the evaporation of the water of solution, Cupric chloride partially decomposes above 300°C to Cuprous chloride and Chlorine. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.
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D.O.T. **Corrosive liquids, n.o.s., (Copper chloride), 8, UN 1760, PG III**
Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

CC 507

Threshold Limited Value	None established for this mixture (ACGIH 1992-93).
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Effects of Overexposure	INGESTION: May cause gastrointestinal irritation, burns, nausea, vomiting, diarrhea. EYES: Corrosive; causes conjunctivitis. SKIN: Irritating to skin, may cause allergic reaction. INHALATION: Causes upper respiratory irritation, burns, headache, dizziness, nausea and incoordination.
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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 AS MIST: Remove to fresh air, treat symptomatically, and get medical attention.
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SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature to cause evaporation.
	Stable	X		
Incompatibility (Materials to Avoid)	Nitric acid.			
Hazardous Decomposition Products	May decompose to Cuprous chloride and Chlorine.			
Hazardous Polymerization	Conditions to Avoid		Not applicable.	
	May Occur	Will Not Occur		
		X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Absorb with inert dry material, scoop up and place in suitable container for proper disposal. Wash spill area with soap and water.
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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.
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SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If misty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved respirator.			
Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.
Protective Gloves	Rubber.		Eye Protection	Chemical safety glasses.
Other Protective Equipment	Goggles, smock, apron, vented hood, proper gloves and eye wash station.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from acids. Wash thoroughly after handling. Keep container tightly closed when not in use.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before reuse.
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For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 3	Date 2/16/99	Approved Michael Raszeja	Chemical Safety Coordinator MR
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