



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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

MSDS No. MM 570  
Effective Date March 31, 1999

## SECTION V HEALTH HAZARD DATA

MM 570

### Threshold Limited Value

None established for this material.  
TWA as Mercury: 0.1 mg/m<sup>3</sup> (Air) (ACGIH 1992-93).

### Effects of Overexposure

**TARGET ORGANS AFFECTED:** Central nervous system, kidneys. Specific data for this compound is not available. May be fatal by inhalation as mist, ingestion or skin absorption. Corrosive, may cause severe burns. **INGESTION:** May cause mercury poisoning. Symptoms of mercury poisoning are violent pain, vomiting, diarrhea, kidney shock, intestinal hemorrhage and death. **INHALATION:** Prolonged or repeated exposure to dust or mist containing mercury compounds cause upper respiratory tract irritation, lung injury, vomiting, chest and abdominal pain, fatigue, gingivitis, difficulty swallowing, irritability, tremors and kidney damage. **SKIN AND EYES:** May produce severe irritation and burns. May be absorbed through skin.

### Emergency and First Aid Procedures

**INGESTION:** If swallowed, if conscious, give several glasses of milk or water to drink. Follow with milk of magnesia, vegetable oil or beaten eggs. If vomiting should occur involuntarily, keep head lower than hips to prevent aspiration. Call physician immediately. Never give anything by mouth to an unconscious person. **SKIN:** Flush thoroughly with water, then wash with soap and water. If irritation persists or burns develop, get medical attention. **INHALATION AS MIST:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

## SECTION VI REACTIVITY DATA

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

Incompatibility (Materials to Avoid)	Specific data for this compound is not available. May react with formates, sulfites, hypophosphites, sulfides, alkalies.
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Hazardous Decomposition Products	Thermal decomposition or heating may produce highly toxic mercury vapors and oxides of nitrogen (NO <sub>x</sub> ).
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
Not applicable.	

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Wearing suitable protective clothing, absorb in vermiculite, sand, earth. Scoop up and place in a suitable container for disposal in an approved chemical landfill. Wash spill area well with water. Save wash water for disposal. Do not contaminate streams and waterways.
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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.
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Dispose of in an approved chemical landfill or contract with a licensed waste disposal service.

## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	Work in ventilation hood. In emergency conditions where mist or vapor occurs wear a NIOSH/MSHA-approved self-contained breathing apparatus or respirator fixed with mercury vapor cartridge.
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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, lab coat, apron, proper gloves, ventilation hood, eye wash station.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool place but above freezing and away from fire hazards. Wash thoroughly after handling.
Keep container tightly closed when not in use.	

Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. Clean up all spills at once. Boiling or heating to dryness yields corrosive fumes and mercury fumes or mist. Do not breathe mercury fumes. This material should not be heated without proper precautions to safely handle highly toxic mercury vapor. Remove and wash contaminated clothing.
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For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 7	Date	3/31/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	MILLON'S REAGENT
Chemical Synonyms	Millon's Protein Test Solution
Formula	Mixture. See Section II.
Unit Size	up to 2.5 Lt.
C.A.S. No.	Mixture. See Section II.

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

NFPA  
HAZARD RATING  
LEAST SLIGHT MODERATE HIGH EXTREME  
0 1 2 3 4

Health	3
Fire	0
Reactivity	3

HMIS \*

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Mercurous Nitrate: (CAS No. 10415-75-5)	17.4% w/w	See Section V.
Nitric Acid: (CAS No. 7697-37-2)	3.8% v/v	TWA: 2 ppm
Water: (CAS No. 7732-18-5)	94.2% v/v	None established.

**DANGER! CORROSIVE! POISON** **MAY BE FATAL IF SWALLOWED. MAY**

**CAUSE SEVERE EYE OR SKIN BURNS. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.**

## SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes below 0°C (32°F)	Specific Gravity (H <sub>2</sub> O = 1)	Approx. 1.05 at 25°C
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	Approx. 98%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless to light yellow 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
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Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES	Should leakage occur do not allow water to contaminate streams and waterways. Collect contaminated water for proper disposal.
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In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 157)

UNUSUAL FIRE AND EXPLOSION HAZARDS	
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Dangerous when heated to decomposition, emits highly toxic fumes of mercury and oxides of nitrogen (NO<sub>x</sub>). Increases the flammability of combustible, organic and readily oxidizable materials.

D.O.T.	NITRIC ACID, (SOLUTION), 8, UN 2031, PG II
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Approved by U.S. Department of Labor "essentially similar" to form OSHA-20