



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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

MSDS No. MM 232
Effective Date March 21, 1997

SECTION V HEALTH HAZARD DATA

MM 232

Threshold Limited Value

None established for this solution. TWA: 0.2 mg/m³ as manganese dust and compounds: (ACGIH 1992-93).

Effects of Overexposure

May be harmful by ingestion. May cause irritation. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **INHALATION AS MIST:** Remove to fresh air. If irritation or illness develops, get medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature to cause evaporation.
	Stable	X	

Incompatibility (Materials to Avoid)	Strong reducing agents.
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Hazardous Decomposition Products	Sulfur dioxide and other oxides.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Absorb spill with an inert dry material, sweep up and place in a 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.
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Dispose of in accordance with federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If misty conditions prevail, wear a NIOSH/MSHA-approved dust mask or respirator for fumes.
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Ventilation	Local Exhaust	None needed.	Special	No.
	Mechanical (General)	None needed.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Goggles, lab coat, eye wash station, ventilation hood, proper gloves.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry, area. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Do not get in eyes, on skin, or on clothing.
Remove and wash contaminated clothing.

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

Revision	No. 1	Date	3/21/97	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	MANGANESE SULFATE 0.1 MOLAR SOLUTION
Chemical Synonyms	Manganese (II) Sulfate Aqueous Solution
Formula	Mixture.
Unit Size	up to 4 Lt.
C.A.S. No.	Mixture.

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

Health	1
Fire	0
Reactivity	0

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

HMIS *
3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Manganous Sulfate: (CAS NO. 7785-87-7)	1.51%	None established.
Water: (CAS NO. 7732-18-5)	98.49%	None established.

CAUTION! MAY BE HARMFUL IF SWALLOWED .

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes @ approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	2.95
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	98.49%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	Slightly < 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless, water-like liquid; no odor.		

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	Water or dry chemical is suitable.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from this solution, which may cause hazardous decomposition products to be produced as dust or fume.

D.O.T. NON-REGULATED.

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