



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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

MSDS No. MM 230  
Effective Date March 26, 1999

## SECTION V HEALTH HAZARD DATA

MM 230

### Threshold Limited Value

TWA: 5 mg/m<sup>3</sup> as manganese dust and compounds: (ACGIH 1992-93).

### Effects of Overexposure

**TARGET ORGANS AFFECTED:** Liver kidneys, central nervous system. **EYES AND SKIN:** May cause irritation. **INHALATION:** May cause irritation to nasal passage. Long term exposure to Manganese compounds can cause Manganese poisoning. Symptoms include headache, apathy and spasms. **INGESTION:** Mild irritation.

### 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:** Remove to fresh air. If irritation or illness develops, get medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **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 heat and fire.
	Stable	X		

Incompatibility (Materials to Avoid)	Strong reducing agents.
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Hazardous Decomposition Products	Oxides of sulfur.
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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	Those involved in clean-up should use protection against skin contact or inhalation of dust or mist. Scoop up solid and place in suitable container for recovery or 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 waste disposal service.

## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail, wear a NIOSH/MSHA-approved dust mask or respirator for fumes.
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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, eye wash station, ventilation hood, proper gloves.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated 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. Avoid breathing dust. Use with adequate ventilation. Remove and wash contaminated clothing.

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

Revision	No. 4	Date	3/26/99	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	MANGANOUS SULFATE	 CHEMTREC 800-424-9300 Day 716-226-6177  NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4  HMIS * 3 4
Chemical Synonyms	Manganese (II) Sulfate, Monohydrate	
Formula	MnSO <sub>4</sub> •H <sub>2</sub> O	
Unit Size	up to 2.5 Kg.	
C.A.S. No.	10034-96-5	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
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Manganous Sulfate	100%	See Section V.
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WARNING! HARMFUL IF SWALLOWED		
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OR INHALED. HARMFUL DUST.		
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## SECTION III PHYSICAL DATA

Melting Point (°F)	Stable 57-117°C (134-242°F)	Specific Gravity (H <sub>2</sub> O = 1)	2.95
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Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	48%
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Vapor Pressure (mm Hg)	N/A	Evaporation Rate (Butyl acetate = 1)	N/A
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Vapor Density (Air=1)	N/A		
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Solubility in Water	98.47 @ 48°C (118°F)		
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Appearance & Odor	Pale red, slightly efflorescent powder; no odor.		
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## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
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Extinguisher Media	Water or dry chemical is suitable.				
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### SPECIAL FIREFIGHTING PROCEDURES

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

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products of oxides of sulfur.

D.O.T. NON-REGULATED.

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