



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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Avon, New York 14414  
(716) 226-6177

MSDS No. MM 110  
Effective Date March 27, 1998

## SECTION V HEALTH HAZARD DATA

MM 110

### Threshold Limited Value

Magnesium Oxide fume: TWA 10 mg/m<sup>3</sup>. (ACGIH 1992-93).  
OSHA (PEL): TWA = 15 mg/m<sup>3</sup>.

### Effects of Overexposure

**INGESTION:** Slowly absorbed that oral administration causes nothing more than purging. If evacuation fails to occur, irritation of the mucous membranes and absorption can occur.  
**INHALATION:** Can produce respiratory irritation with resulting edema and difficulty in breathing. Fume can produce metal fume fever, an illness similar to influenza. Symptoms: fever, cough oppression in the chest, nausea, vomiting, headache, muscular pain and leukocytosis. **SKIN:** Not hazardous. **EYES:** Slight irritant.

### Emergency and First Aid Procedures

**EYES:** Flush thoroughly with water, lifting lower and upper eyelids occasionally. If irritation develops or persists, get medical attention.  
**SKIN:** Flush with water, then wash with mild soap and water.  
**INHALATION:** Remove to fresh air. If illness or discomfort develops, get medical attention. **INGESTION:** If swallowed, treat symptomatically and supportively. Get medical attention. Never give anything by mouth to an unconscious person.

## SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Absorbs carbon dioxide and water from the air.
	Stable	X		

Incompatibility (Materials to Avoid)	Strong oxidizers, chlorine trifluoride. If magnesium oxide is heated to volatilization, magnesium oxide fumes may be generated.
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Hazardous Decomposition Products	Magnesium metal fumes.
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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	Recover for use if not contaminated. Wear protective safety equipment and use adequate ventilation. Avoid making dust. Sweep up and place in a suitable container for disposal.
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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.
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## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	Adequate to maintain below exposure limit.

Protective Gloves	Rubber for prolonged exposure.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Eye wash station, goggles, ventilation hood, lab coat, proper gloves.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a dry place. 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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Avoid contact with eyes. Avoid prolonged or repeated contact with skin. 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	3/27/98	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	MAGNESIUM OXIDE
Chemical Synonyms	Magnesium Oxide, Heavy, Light Powder
Formula	MgO
Unit Size	up to 2.5 Kg.
C.A.S. No.	1309-48-4

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

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

Health	1
Fire	0
Reactivity	1

HMIS \*  
HIGH EXTREME  
3 4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Magnesium Oxide	100%	None established.
CAUTION! DO NOT BREATHE DUST.		
MAY BE HARMFUL IF INHALED.		

## SECTION III PHYSICAL DATA

Melting Point (°F)	2800°C (5072°F)	Specific Gravity (H <sub>2</sub> O = 1)	3.65-3.75
Boiling Point (°F)	3600°C (6512°F)	Percent Volatile by Volume (%)	Non-volatile (NA).
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate (n-Butyl Ac. = 1)	Non-volatile (NA).
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	0.4 grams per 100 mL. water at 20°C.		
Appearance & Odor	White fluffy or dense powder; 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.
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### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus. No acute hazard. Move container from fire area if possible. Avoid breathing vapors or dust; keep upwind.

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce dust of magnesium oxide. Negligible fire hazard when exposed to heat or flame.

D.O.T. NON-REGULATED.

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