

Safety Data Sheet

Magnesium Oxide



Section 1 Product Description

Product Name: Magnesium Oxide
Recommended Use: Science education applications
Synonyms: Calcined Magnesite; Magnesia
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING

Causes eye irritation.

GHS Classification:

Serious Eye Damage/Eye Irritation Category 2B, Acute Toxicity - Inhalation Dust / Mist Category 5

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Magnesium Oxide	1309-48-4	100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: None Known
Hazardous Combustion Products: None Known

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Avoid the generation of dusts during clean-up.

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Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Keep container tightly closed in a cool, well-ventilated place.
Storage: Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Magnesium Oxide	10 mg/m3 TWA (inhalable fraction)	N/A	15 mg/m3 TWA (fume, total particulate)	N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume generated from the handling of this product.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Respirator Type(s):

NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

No information available

Section 9 Physical Data

Formula: MgO	Vapor Pressure: N/A
Molecular Weight: 40.30	Evaporation Rate (BuAc=1): N/A
Appearance: White to Gray Powder	Vapor Density (Air=1): N/A
Odor: No data available	Specific Gravity: 3.60
Odor Threshold: No data available	Solubility in Water: Practically Insoluble
pH: No data available	Log Pow (calculated): No data available
Melting Point: No data available 2852 C	Autoignition Temperature: No data available
Boiling Point: No data available 3600 C	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: No data available
Flammable Limits in Air: N/A	Percent Volatile by Volume: 3%

Section 10 Reactivity Data

Reactivity:	Not generally reactive under normal conditions.
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Exposure to moisture
Hazardous Decomposition Products:	None Known
Hazardous Polymerization:	Will not occur

Section 11 Toxicity Data

Routes of Entry	Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):	Respiratory Irritation, Eye Irritation
Delayed Effects:	No data available

Acute Toxicity:

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Chemical Name No data available	CAS Number 1309-48-4	Oral LD50 Not determined	Dermal LD50 Not determined	Inhalation LC50 Not determined
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Carcinogenicity: Chemical Name No data available	CAS Number 1309-48-4	IARC Not listed	NTP Not listed	OSHA Not listed
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Chronic Effects:

Mutagenicity:	No evidence of a mutagenic effect.
Teratogenicity:	No evidence of a teratogenic effect (birth defect).
Sensitization:	No evidence of a sensitization effect.
Reproductive:	No evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	No information available
Chronic:	Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview:	This material is not expected to be harmful to the ecology.
Mobility:	No data
Persistence:	No data
Bioaccumulation:	No data
Degradability:	No data
Other Adverse Effects:	No data

Chemical Name N/A	CAS Number 1309-48-4	Eco Toxicity
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Section 13 Disposal Information

Disposal Methods:	Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s):	This material is not considered to be a RCRA hazardous waste.

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by DOT.	Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.
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Section 15 Regulatory Information

TSCA Status:	All components in this product are on the TSCA Inventory.
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Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	1309-48-4	No	No	No	No	No

Section 16 Additional Information

Revised: 09/09/2015	Replaces: 09/03/2014	Printed: 10-29-2015
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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

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ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health