

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name Magnesium oxide

CAS number 1309-48-4

Synonyms Magnesia

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

#### 1.4 Emergency telephone

<b>Emergency Phone #</b>	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### 2.2 GHS Label elements, including precautionary statements

None required.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Magnesium oxide	Magnesia	1309-48-4	>98%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

<b>If inhaled</b>	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>If swallowed</b>	Do NOT induce vomiting. Get medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam.
<b>Unsuitable extinguishing media</b>	No information available.

### 5.2 Specific hazards arising from the substance or mixture

Non-combustible. Containers may explode when heated.  
Hazardous Combustion Products: Magnesium oxides.

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

#### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### NFPA

Health	Flammability	Instability	Physical hazards
1	0	1	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### 6.2 Environmental precautions

See Section 12 for additional Ecological Information.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage conditions**

Keep containers tightly closed in a dry, cool, and well-ventilated place.

**Incompatibilities**

Strong oxidizing agents. Strong acids. Water.

**SECTION 8: Exposure controls/personal protection**

**8.1 Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Component	Type	Value
Magnesium oxide	(Vacated) TWA	10 mg/m3
	TWA	15 mg/m3

**US. ACGIH Threshold Limit Values**

Component	Type	Value
Magnesium oxide	TWA	10 mg/m3

**US. NIOSH: Pocket Guide to Chemical Hazards**

Component	Type	Value
Magnesium oxide	IDLH	750 mg/m3

**Biological occupational exposure limits**

No information available.

**8.2 Exposure controls**

**Appropriate engineering controls**

None under normal use conditions.

**Personal protective equipment**

**Eye/face protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

### **Body Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

### **Respiratory protection**

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter.

### **Control of environmental exposure**

No information available.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

Physical State	Solid powder
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	10.3 (saturated solution)
Melting Point/Range	2800 °C / 5072 °F
Boiling Point/Range	3600 °C / 6512 °F
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	0 hPa @ 20 °C
Vapor Density	Not applicable
Density	3.58
Solubility	Hydrolyses
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	Not applicable
Molecular Formula	MgO
Molecular Weight	40.29 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

### **9.2 Other safety information**

No information available.

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Unstable on exposure to moisture. Moisture sensitive.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products. Exposure to air. Exposure to moist air or water.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Water.

### 10.6 Hazardous decomposition products

Magnesium oxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Magnesium oxide	3870 mg/kg (Rat)	-	-

#### Skin corrosion/irritation

No information available.

#### Serious eye damage/eye irritation

No information available.

#### Respiratory or skin sensitization

No information available.

#### Germ cell mutagenicity

No information available.

#### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Magnesium oxide	1309-48-4	Not listed	Not listed	Not listed	Not listed	Not listed

#### Specific target organ toxicity - single exposure

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

Reacts with water so no ecotoxicity data for the substance is available.

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information available.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**SECTION 14: Transport information**

**DOT (US)** Not regulated.

**IMDG** Not regulated.

**IATA** Not regulated.

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.



## US state regulations

### US. Massachusetts RTK - Substance List

Listed, Magnesium oxide (CAS #1309-48-4).

### US. New Jersey Worker and Community Right-to-Know Act

Listed, Magnesium oxide (CAS #1309-48-4).

### US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Magnesium oxide (CAS #1309-48-4).

### California Proposition 65

Not listed.

## SECTION 16: Other information

Issue date: 05/13/2019

Revision 1: 02/06/2025

## SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.