

# Magnesium Hydroxide

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Magnesium Hydroxide
<b>Other Means of Identification</b>	Magnesium dihydroxide, Magnesium oxide (Mg(OH) <sub>2</sub> )
<b>Product Code(s)</b>	MA2305, MA2306, MA2310, MA2320
<b>Product Family</b>	Inorganic Solid
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0804

## SECTION 2. HAZARD IDENTIFICATION

### Classification

Not classified under any hazard class.

### Label Elements

Not applicable

### Other Hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers
Magnesium hydroxide	1309-42-8	> 98	Magnesium dihydroxide, Magnesium oxide (Mg(OH) <sub>2</sub> )

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

#### Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs, get medical advice or attention.

#### Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

#### Ingestion

Rinse mouth with water. Call a Poison Centre or doctor if you feel unwell.

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### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

### **Most Important Symptoms and Effects, Acute and Delayed**

None known.

### **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

#### **Unsuitable Extinguishing Media**

None known.

### **Specific Hazards Arising from the Product**

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: Magnesium Oxide.

### **Special Protective Equipment and Precautions for Fire-fighters**

Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Remove or isolate incompatible materials as well as other hazardous materials. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

### **Methods and Materials for Containment and Cleaning Up**

Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Flush spill area.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating dusts. Prevent accidental contact with incompatible chemicals. Only use where there is adequate ventilation.

### **Conditions for Safe Storage**

Store in an area that is: cool, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity).

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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## Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Magnesium hydroxide	Not established		Not established			

Consult local authorities for provincial exposure limits. Consult local authorities for state exposure limits.

### Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### Individual Protection Measures

#### Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

#### Skin Protection

Not required, if used as directed. In case of an emergency (e.g. an uncontrolled release): wear chemical protective clothing e.g. gloves, aprons, boots.

No specific guidelines are available. Contact chemical manufacturer/supplier for advice.

#### Respiratory Protection

No specific guidelines are available. Contact chemical manufacturer, supplier or appropriate government agencies for advice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	White powder. Absorbs moisture from the air.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	9.5 - 10.5
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Will not burn.
<b>Upper/Lower Flammability or Explosive Limit</b>	Not applicable (upper); Not applicable (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	2.36 at 20 °C
<b>Solubility</b>	Practically insoluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	350 °C (662 °F)
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Weight</b>	58.32

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

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Not reactive under normal conditions of use.

**Chemical Stability**

Normally stable.

**Possibility of Hazardous Reactions**

None known.

**Conditions to Avoid**

Generation of dust. Incompatible materials. Excess heat. Exposure to air. Water, moisture or humidity.

**Incompatible Materials**

Strong acids (e.g. hydrochloric acid), metals (e.g. aluminum).

**Hazardous Decomposition Products**

Magnesium oxide.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Likely Routes of Exposure**

Inhalation; skin contact; eye contact; ingestion.

**Acute Toxicity**

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Magnesium hydroxide	Not available	8500 mg/kg (rat)	Not available

**Skin Corrosion/Irritation**

No information was located.

**Serious Eye Damage/Irritation**

There is limited evidence of mild irritation.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

May cause nose and throat irritation.

**Ingestion**

No information was located.

**Aspiration Hazard**

No information was located.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

No information was located.

**Respiratory and/or Skin Sensitization**

No information was located.

**Carcinogenicity**

Chemical Name	IARC	ACGIH®	NTP	OSHA
Magnesium hydroxide	Not Listed	Not designated	Not Listed	Not Listed

Not known to cause cancer.

#### **Reproductive Toxicity**

##### **Development of Offspring**

Not known to harm the unborn child.

##### **Sexual Function and Fertility**

Not known to cause effects on sexual function or fertility.

##### **Effects on or via Lactation**

No information was located.

#### **Germ Cell Mutagenicity**

Not known to be a mutagen.

#### **Interactive Effects**

No information was located.

## **SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

## **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

**Special Precautions** Not applicable

#### **Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## **SECTION 15. REGULATORY INFORMATION**

#### **Safety, Health and Environmental Regulations**

##### **Canada**

##### **Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

##### **USA**

##### **Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

## **SECTION 16. OTHER INFORMATION**

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

**Date of Preparation** November 24, 2016

**Date of Last Revision** December 06, 2016

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.

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