



HUBER ENGINEERED MATERIALS

# Safety Data Sheet

## Zerogen® 50SA

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03  
Canadian Workplace Hazardous Material Information System (WHMIS) 2015  
Mexico NOM-018-STPS-2000; NOM-018-STPS-2015  
Globally Harmonized System (GHS)

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

### 1.1. Product identifier

Product Name: Zerogen® 50SA

#### Magnesium Hydroxide

CAS Number 1309-42-8

Weight-% -

#### Surface Treatment

CAS Number Proprietary

Weight-% -

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

Recommended Use Smoke suppressant. flame retardant.

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

Company: J.M. Huber Corporation  
3100 Cumberland Boulevard, Suite 600  
Atlanta, GA 30339 USA  
Tel: +1 678 247-7300

Internet [www.hubermaterials.com](http://www.hubermaterials.com)

E-mail [hubermaterials@huber.com](mailto:hubermaterials@huber.com)

1.4. Emergency telephone number CHEMTREC: +1 800 424 9300 or International +1 703 527 3887

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Physical Hazards Not classified

Health Hazards Not classified

Environmental Hazard Not classified

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## 2.2. Label elements

<b>Symbols/Pictograms</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

## Precautionary Statements

<b>Prevention</b>	Employ good industrial hygiene practice Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection
<b>Response</b>	IF ON SKIN: Wash with plenty of soap and water IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
<b>Storage</b>	Store away from incompatible materials
<b>Disposal</b>	Dispose of contents/containers in accordance with local regulations

**Hazards not otherwise classified (HNOC)** None known.

## SECTION 3: Composition/information on ingredients

Chemical Name	CAS Number	TSCA: United States	Canada (DSL)	Mexico	REACH registration number	OSHA Regulatory Status	WHMIS	Weight-%
Magnesium Hydroxide	1309-42-8	Y	Y	Y	01-211948875 6-18-0040	Not regulated	Not regulated	-
Surface Treatment	Proprietary	Y	Y	--		Not classified		-

**Legend**

X / Y: Complies , - / N: Not Listed , Exempt

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General Advice**

Do not handle until all safety precautions have been read and understood. Employ good industrial hygiene practice. Wear suitable protective clothing, gloves and eye/face protection. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. When in doubt or if symptoms are observed, get medical advice.

**Eye Contact**

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Inhalation</b>	Do not breathe dust. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Eye irritation.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Use extinguishing agent suitable for type of surrounding fire.

#### **Unsuitable Extinguishing Media**

None known.

### 5.2. Special hazards arising from the substance or mixture

Non-combustible. Substance does not burn.

### 5.3. Advice for firefighters

#### **Special protective equipment for firefighters**

Wear self-contained breathing apparatus and protective suit.

#### **Fire-fighting measures**

Water mist may be used to cool closed containers.

## SECTION 6: Accidental release measures

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

Keep unauthorized personnel away. Use personal protection recommended in Section 8. Avoid dust formation. Ensure adequate ventilation.

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**For non-emergency personnel** Keep unauthorized personnel away. Wear suitable protective clothing and gloves.

**For emergency responders** Keep unauthorized personnel away.

**6.2. Environmental precautions** Avoid runoff to waterways and sewers.

**6.3. Methods and material for containment and cleaning up** Large Spill: Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust Small Spill: Vacuum or sweep material and place in a disposal container

**6.4. Reference to other sections** Section 8: Exposure controls and personal protection. See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Minimize dust generation and accumulation. Provide local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities** Store away from incompatible materials. Keep container tightly closed and dry.

**7.3. Specific end use(s)** Flame retardant. Smoke suppressant.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### Magnesium Hydroxide

OSHA	TWA: 15 mg/m <sup>3</sup> total dust 5 mg/m <sup>3</sup> respirable
ACGIH	TLV-TWA: 8-hr : 10 mg/m <sup>3</sup> (total dust) 3 mg/m <sup>3</sup> (respirable fraction)
NIOSH	TWA: 15 mg/m <sup>3</sup> (total dust)
Canada	Not established
Mexico	TWA/OEL (VLE-PPT): Not established

**Biological Limit Values:** None

**Derived No Effect Level (DNEL)** Consumer - oral, long-term - local and systemic 4.74 mg/kg bw/day Worker - inhalative, long-term - local and systemic 10.74 mg/m<sup>3</sup>

**Predicted No Effect Concentration (PNEC)** No information available

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## 8.2. Exposure controls

**Engineering Measures**                      Ensure adequate ventilation, especially in confined areas. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

### Personal protective equipment

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and Body Protection</b>	Wear suitable protective clothing.
<b>Hand protection</b>	For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
<b>Hand Protection</b>	Wear suitable gloves.
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection.

**Thermal hazards**                              None known.

**Hygiene Measures**                          No information available.

**Environmental Exposure Controls**                      Dispose of in accordance with local regulations.

## SECTION 9: Physical and chemical properties

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

**Appearance:**

<b>Physical State</b>	Solid Powder
<b>Color</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH:</b>	8.4-10.2 (5% water suspension)
<b>Melting Point / Melting Range</b>	No information available
<b>Initial boiling point</b>	No information available
<b>Flash Point:</b>	Non-combustible.
<b>Evaporation Rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper flammability limit:</b>	
<b>Lower flammability limit:</b>	
<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Density</b>	2.4 g/cm <sup>3</sup> , 20°C
<b>Relative Density</b>	
<b>Water Solubility</b>	11.7 mg/l , 25° C
<b>Solubility in other solvents</b>	
<b>Partition coefficient</b>	Not available
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	626 °F (330° C)
<b>Oxidizing Properties</b>	Not oxidizing

Specific Gravity 2.4 g/cc

**SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	None
<b>10.2. Chemical stability</b>	Stable under normal conditions
<b>10.3. Possibility of hazardous reactions</b>	No specific hazard known
<b>10.4. Conditions to avoid</b>	None known.
<b>10.5. Incompatible materials</b>	None known
<b>10.6. Hazardous decomposition products</b>	None known

**SECTION 11: Toxicological information**

**General Information** Users are advised to consider national Occupational Exposure Limits or other equivalent values.

**Information on Likely Routes of Exposure**

<b>Inhalation</b>	Inhalation of dust may cause irritation of the respiratory system
<b>Skin</b>	Prolonged exposure may cause skin irritation
<b>Eyes</b>	May cause irritation.
<b>Ingestion</b>	Gastrointestinal discomfort
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

**11.1. Information on toxicological effects****Magnesium Hydroxide**  
Oral LD50

8500 mg/kg Rat

<b>Respiratory Sensitization</b>	Based on available data, the classification criteria are not met
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met
<b>Skin Corrosion/Irritation</b>	Based on available data, the classification criteria are not met

<b>Skin Sensitization</b>	Based on available data, the classification criteria are not met
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - Single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - Repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Mixture versus substance information</b>	No information available

## SECTION 12: Ecological information

**12.1. Ecotoxicity** Not classified. Avoid release to the environment.

### Magnesium Hydroxide

**WGK Classification (VwVwS)** 5209. WGK: nwg

**12.2. Persistence and degradability** No data available.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient** Not available

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** Not available.

**12.6. Other adverse effects** None known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws





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			<b>number</b>										
Magnesium Hydroxide	1309-42-8	215-170-3	01-211948 8756-18-0 040	Y	Y	Y	ENCS:(1)-3 86 ISHL:(1)-38 6	KE-22716	Y	Y	Y	Y	Y
Surface Treatment	Proprietary	*	Exempt	Y	Y	Y	Y	Y	--	--	Y	Y	Y

**Legend**

X / Y: Complies - / N: Not Listed Exempt

## US Federal Regulations

### EPA

#### CERCLA

#### Magnesium Hydroxide

CERCLA No

SARA 311/312 Hazardous No

Categorization

## U.S. State Right-to-Know Regulations

Chemical Name	CAS Number	California Proposition 65	California CPR	Massachusetts	Minnesota	New Jersey	Pennsylvania
Magnesium Hydroxide	1309-42-8	No		No	No	No	No
Surface Treatment	Proprietary	No		No	No	No	No

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any Proposition 65 chemicals

## CANADA

### WHMIS:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

#### Magnesium Hydroxide

Not regulated

## SECTION 16: Other information

### Prepared by

Huber Engineered Materials (HEM) Global Regulatory Affairs  
regulatory.affairs@huber.com

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### Reason for Version

OSHA (Occupational Safety and Health Administration of the US Department of Labor).

### Training Advice

Do not handle until all safety precautions have been read and understood.

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### Abbreviations and acronyms

International Agency for Research on Cancer (IARC)  
International Air Transport Association (IATA)  
International Maritime Dangerous Goods (IMDG)  
International Uniform Chemical Information Database (IUCLID)  
Workplace Hazardous Materials Information System (WHMIS) status and classification  
EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification  
DOT (Department of Transportation)  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
TWA - Time-Weighted Average  
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)  
The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)  
PPE - Personal Protection Equipment  
NIOSH - National Institute for Occupational Safety and Health  
TDG (Transport of Dangerous Goods) Canada  
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)  
Reportable Quantity (RQ) (RQ% in mixture)  
STEL - Short Term Exposure Limit  
TLV® - Threshold Limit Value  
Derived No Effect Level (DNEL)  
SVHC: Substances of Very High Concern for Authorization:  
Land transport (ADR/RID)  
Biochemical oxygen demand (BOD)  
Chemical oxygen demand (COD)  
ICAO (air)  
(IMDG) International Maritime Dangerous Goods  
Positive Pressure Self-Contained Breathing Apparatus (SCBA)  
Predicted No Effect Concentration (PNEC)  
Globally Harmonized System (GHS)

### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of Safety Data Sheet**