



HUBER ENGINEERED MATERIALS

# Safety Data Sheet

## Zerogen® 50SG

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® 50SG

#### Magnesium Hydroxide

CAS Number 1309-42-8

Weight-% >97

#### Surface Treatment

Weight-% <3

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

Recommended Use flame retardant. Smoke suppressant.

### 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

OSHA Regulatory Status This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Physical Hazards Not classified

Health Hazards Not classified

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**Environmental Hazard** Not classified

### 2.2. Label elements

**Symbols/Pictograms** None

**Signal Word** None

**Hazard Statements** None

**Hazard Statements** None

### Precautionary Statements

**Prevention** Do not handle until all safety precautions have been read and understood.  
Employ good industrial hygiene practice  
Do not breathe dust  
Wear protective gloves/protective clothing/eye protection/face protection

**Response** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
IF ON SKIN: Wash with plenty of soap and water  
If swallowed, rinse mouth with water (only if the person is conscious)  
Drink plenty of water

**Storage** Store away from incompatible materials  
Keep in a dry place

**Disposal** Dispose of contents/containers in accordance with local regulations

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

## 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	>97
Surface Treatment		Y	Y	Y		Not classified		<3

#### Legend

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General Advice</b>	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.
<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<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>	May cause irritation to mucous membranes and respiratory tract. Contact with dust can cause mechanical irritation or drying of the skin.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treatment should be symptomatic and supportive. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>).

#### **Unsuitable Extinguishing Media**

None known.

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

None known.

### 5.3. Advice for firefighters

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

Wear a self-contained breathing apparatus and chemical protective clothing.

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

Water mist may be used to cool closed containers. No special fire protection measures are necessary. Standard procedure for chemical fires.

## SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures**      Keep unauthorized personnel away. Avoid dust formation. Ensure adequate ventilation. Use personal protection recommended in Section 8.
- For non-emergency personnel**      Keep unauthorized personnel away.
- For emergency responders**      Keep unauthorized personnel away. Use personal protection recommended in Section 8.
- 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**      Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not breathe dust. Ensure adequate ventilation. Wear appropriate personal protective clothing to prevent skin contact. Handle in accordance with good industrial hygiene and safety practice.
- 7.2. Conditions for safe storage, including any incompatibilities**      Keep container tightly closed and dry. Store away from incompatible materials.

## 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

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Mexico

TWA/OEL (VLE-PPT): Not established

**Surface Treatment**

OSHA  
 ACGIH  
 Mexico

Not established  
 10 mg/m<sup>3</sup> (total)  
 No se ha establecido

**Biological Limit Values:** No information available

**8.2. Exposure controls****Engineering Measures**

Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Use exhaust ventilation to keep airborne concentrations below exposure limits. In case of insufficient ventilation, wear suitable respiratory equipment.

**Personal protective equipment****Eye/Face Protection**

Wear safety glasses with side shields (or goggles).

**Skin and Body Protection**

Wear suitable protective clothing.

**Hand protection**

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

**Respiratory Protection**

In case of inadequate ventilation wear respiratory protection.

**Thermal hazards**

None known. Wear suitable protective clothing.

**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:**

**Physical State**  
**Color**

Solid  
 White

**Odor**

Odorless

**Odor Threshold**

No information available

**pH:**

8.4-10.2 (5% water suspension)

**Melting Point / Melting Range**

Not applicable

**Initial boiling point**

Not applicable

**Freezing Point**

Not applicable

**Flash Point:**

Non-combustible.

**Evaporation Rate**

Not applicable.

**Upper flammability limit:**

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<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 applicable
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	626 °F (330° C)
<b>Viscosity</b>	Not applicable.
<b>VOC Content (%)</b>	Not applicable

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Stable under normal conditions
<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>	Incompatible materials.
<b>10.5. Incompatible materials</b>	Strong acids
<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>	Do not breathe dust Inhalation of dust in high concentration may cause irritation of respiratory system
<b>Skin</b>	Contact with dust can cause mechanical irritation or drying of the skin
<b>Eyes</b>	Dust contact with the eyes can lead to mechanical irritation
<b>Ingestion</b>	Ingestion is not a likely route of exposure

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**Aspiration hazard** Not an expected route of exposure.

#### 11.1. Information on toxicological effects

##### Magnesium Hydroxide

**Oral LD50** 8500 mg/kg Rat

##### Surface Treatment

**Dermal LD50** >5000 mg/kg (rabbit)

**Respiratory Sensitization** Based on available data, the classification criteria are not met

**Skin Corrosion/Irritation** Prolonged or repeated contact may dry skin and cause irritation

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Reproductive Toxicity** No information available.

## SECTION 12: Ecological information

**12.1. Ecotoxicity** Not considered to be harmful to aquatic life.

##### 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 applicable

**Bioconcentration factor (BCF)** No data available.

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

**12.5. Results of PBT and vPvB assessment** No data available.

**12.6. Other adverse effects** No information available

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

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<b>Disposal Methods</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Product residue may remain in empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>Waste codes</b>	Waste codes should be assigned by the user based on the application for which the product was used

**Magnesium Hydroxide**

**European Waste Catalog** 060299  
**WGK Classification (VwVwS)** 5209. WGK: nwg

## SECTION 14: Transport information

**Mode of Transportation (Road, Water, Air, Rail)**

<b>TDG -Canada</b>	Not regulated
<b>DOT</b>	Not regulated
<b>ADR</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADN</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated
<b>ICAO</b>	Not regulated

<b>14.1. UN number</b>	None
<b>14.2. UN proper shipping name</b>	None
<b>14.3. Transport hazard class(es)</b>	None
<b>14.4. Packing group</b>	None
<b>14.5. Environmental hazards</b>	No
<b>14.6. Special precautions for user</b>	Not applicable
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable

## SECTION 15: Regulatory information

**Global Inventories**



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Chemical Name	CAS Number	EC No	REACH registration number	Australia (AICS)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Magnesium Hydroxide	1309-42-8	215-170-3	01-211948 8756-18-0 040	Y	Y	Y	ENCS:(1)-386 ISHL:(1)-386	KE-22716	Y	Y	Y	Y	Y
Surface Treatment		*	Exempt	Y	Y	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 Categorization No

### 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							

**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).

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### Training Advice

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

### 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**