



HUBER ENGINEERED MATERIALS

# Safety Data Sheet

Zerogen® 100 SP

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006  
COMMISSION REGULATION (EU) No. 2015/830

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

### 1.1. Product identifier

**Product Name:** Zerogen® 100 SP  
**Chemical Name** Magnesium Hydroxide Surface Treated

Chemical Name	CAS Number	EC No	REACH registration number	(CLP) Regulation (EC 1272/2008)	TSCA: United States	Weight-%
Magnesium Hydroxide	1309-42-8	215-170-3	01-2119488756-18-0040	Not classified	Y	99
Surface Treatment		Proprietary		Not classified	Y	0.4 - 0.6
Surface treatment		*		Not classified	Y	0.2 - 0.7

### 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:** MARTINSWERK GmbH  
Kölner Strasse 110  
50127 Bergheim  
Germany : +49-2271-90.22.78  
Fax. : +49-2271-90.27.17

**E-mail** hubermaterials@huber.com

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

**Poison control center phone number** National Anti-Poison Center UK: +44 844 892 0111 (National Poisons Information Service)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

(CLP) Regulation (EC 1272/2008) Not classified

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**Hazards identification**

<b>Physical Hazard</b>	Not classified
<b>Health Hazards</b>	Not classified
<b>Environmental Hazard</b>	Not classified

**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 Wash hands thoroughly after handling
<b>Response</b>	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
<b>Storage</b>	Keep in a dry place Store away from incompatible materials
<b>Disposal</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**2.3. Other hazards** No information available.

## SECTION 3: Composition/information on ingredients

**3.1. Substances** Not applicable

**3.2. Mixtures** Mixture

Chemical Name	CAS Number	EC No	REACH registration number	(CLP) Regulation (EC 1272/2008)	Annex	TSCA: United States	Weight-%
Magnesium Hydroxide	1309-42-8	215-170-3	01-2119488756-18-0040	Not classified	--	Y	99
Surface Treatment		Proprietary		Not classified	--	Y	0.4 - 0.6
Surface treatment		*		Not classified	--	Y	0.2 - 0.7

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

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<b>General Advice</b>	When in doubt or if symptoms are observed, get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Inhalation</b>	Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Notes to Physician</b>	Treat symptomatically.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. 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>	Treat symptomatically. 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**

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

#### **Unsuitable Extinguishing Media**

None known.

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

Non-combustible.

### 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.

## SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures**      Avoid dust formation. Ensure adequate ventilation. Use personal protection recommended in Section 8. Keep unauthorized personnel away.
- 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  
 Ensure adequate ventilation  
 Handle in accordance with good industrial hygiene and safety practice  
 Use personal protective equipment as required
- 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

ACGIH	TLV-TWA: 8-hr : 10 mg/m <sup>3</sup> (total dust) 3 mg/m <sup>3</sup> (respirable fraction)
OSHA	TWA: 15 mg/m <sup>3</sup> total dust 5 mg/m <sup>3</sup> respirable
NIOSH	TWA: 15 mg/m <sup>3</sup> (total dust)

**Recommended monitoring procedures**      Refer also to national guidance documents for information on currently recommended monitoring procedures

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**Biological Limit Values:** None

### 8.2. Exposure controls

**Engineering Measures** Do not handle until all safety precautions have been read and understood  
 Ensure adequate ventilation, especially in confined areas  
 Provide a good standard of controlled ventilation (10 to 15 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** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**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>Freezing Point</b>	Not applicable
<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>Relative Density</b>	

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<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>Specific Gravity</b>	2.4 g/cm <sup>3</sup> , 20° C

## 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. Dust formation.
<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>	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
<b>Aspiration hazard</b>	Not an expected route of exposure.

### 11.1. Information on toxicological effects

<b><u>Magnesium Hydroxide</u></b>	
<b>Oral LD50</b>	8500 mg/kg Rat

**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**

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

**Contaminated Packaging** Product residue may remain in empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**Waste codes** 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**

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

ADR	Not regulated
RID	Not regulated
ADN	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
ICAO	Not regulated

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

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Global Inventories

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		Proprietary		Present	Present (DSL)	Present	(2)-2066 (ENCS)	KE-13330		Present	Present	Present	Y
Surface treatment		*		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

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

#### National Regulations

##### Germany

##### Magnesium Hydroxide

WGK Classification (VwVws)   5209. WGK: nwg



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### SECTION 16: Other information

**Reason for Revision** This SDS has been revised in the following section(s) 1 , 3 , 8  
 This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 & COMMISSION REGULATION (EU) No. 2015/830

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**Prepared by** Huber Engineered Materials Global Regulatory Affairs  
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**(CLP) Regulation (EC 1272/2008)** Not classified

#### Labeling

**Symbols/Pictograms** None  
**Signal Word** None  
**Hazard Statements** None

**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  
 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

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in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**