# Safety Data Sheet

## Zerogen® 50 SV

OSHA HCS 2024
Canadian Workplace Hazardous Material Information System (WHMIS) 2015 rev 2022
Mexico NOM-018-STPS-2000; NOM-018-STPS-2015
GHS (Globally Harmonized System)

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

### 1.1. Product identifier

**Product Name:** Zerogen® 50 SV

### 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.huberadvancedmaterials.com

**Contact E-Mail** www.huberadvancedmaterials.com/contact

### 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)

**GHS Classification** This product is not classified as hazardous according to the UN GHS guideline and labeling is not required

**Physical Hazards** Not classified.

**Health Hazards** Not classified.

**Environmental Hazard** Not classified.

### 2.2. Label elements

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

**Precautionary Statements**

| | |
|---|---|
| **Prevention** | Do not handle until all safety precautions have been read and understood<br>Employ good industrial hygiene practice<br>Do not breathe dust<br>Wear protective gloves/protective clothing/eye protection/face protection |
| **Response** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing<br>IF ON SKIN: Wash with plenty of soap and water |
| **Storage** | Store away from incompatible materials<br>Keep in a dry place |
| **Disposal** | Disposal should be in accordance with applicable regional, national and local laws and regulations |

| | |
|---|---|
| **Hazards not otherwise classified (HNOC)** | None known. |
| **Hazards associated with known or reasonably anticipated uses** | None known. |

## SECTION 3: Composition/information on ingredients

| Chemical Name | CAS Number | Weight-% |
|---|---|---|
| Magnesium Hydroxide Surface Treated | 1309-42-8 | >98 |

## 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. |

| | |
|---|---|
| **Skin Contact** | Wash with plenty of soap and water. |
| **Ingestion** | Rinse mouth thoroughly with water. |
| **Inhalation** | Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| **Aspiration hazard** | Not an expected route of exposure. |
| **4.2. Most important symptoms and effects, both acute and delayed** | Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin. |
| **4.3. Indication of any immediate medical attention and special treatment needed** | 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). Dry chemical. Foam. Carbon dioxide (CO2).

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

**emergency procedures**

| | |
|---|---|
| **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 Surface Treated**

| | |
|---|---|
| OSHA | TWA: 15 mg/m³ total dust<br>5 mg/m³ respirable |
| ACGIH | TLV-TWA: 8-hr : 10 mg/m³ (total dust)<br>3 mg/m³ (respirable fraction) |
| NIOSH | TWA 15 mg/m³ (total dust) |
| Canada | Not established |

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

**DNEL (Derived No Effect Level)** No information available

**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** | Solid Powder |
| **Color** | White |
| **Odor** | Odorless |
| **pH:** | 8.4 - 10.2 5% Water suspension |
| **Melting Point / Melting Range** | Not applicable |
| **Melting point / Freezing point** | Not applicable |
| **Initial boiling point and boiling range** | Not applicable |
| **Freezing Point** | Not applicable |
| **Flash Point** | Non-combustible |
| **Flammability** | Not applicable |
| **Upper flammability limit:** | -- |
| **Lower flammability limit:** | -- |
| **Vapor Pressure** | Not applicable |
| **Relative Vapor Density** | Not applicable |
| **Relative Vapor Density** | Not applicable |
| **Density** | No data available |
| **Relative Density** | 2.4 g/cm3, 20° C |
| **Water Solubility** | 11.7 mg/l , 25° C |
| **Solubility in other solvents** | No information available |
| **Partition coefficient** | Not applicable |
| **Autoignition Temperature** | Not applicable |
| **Decomposition Temperature** | 626 °F (330° C) |
| **Viscosity** | No information available. |

| | |
|---|---|
| **Kinematic viscosity** | Not applicable |
| **Oxidizing Properties** | Not applicable |
| **Particle Characteristics** | No information available |
| **VOC Content (%)** | Not applicable |

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes**
Not applicable

**9.2.2. Other safety characteristics**
Not applicable

## SECTION 10: Stability and reactivity

| | |
|---|---|
| **10.1. Reactivity** | Stable under normal conditions |
| **10.2. Chemical stability** | Stable under normal conditions |
| **10.3. Possibility of hazardous reactions** | No specific hazard known |
| **10.4. Conditions to avoid** | Incompatible materials Dust formation |
| **10.5. Incompatible materials** | Strong acids |
| **10.6. Hazardous decomposition products** | None known |

## SECTION 11: Toxicological information

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

**11.1. Information on toxicological effects**

**Magnesium Hydroxide Surface Treated**

| | |
|---|---|
| **LD50s and LC50s** | 2.1 mg/L Inhalation LC50 Rat 4 h |
| **Oral LD50** | 8500 mg/kg Rat |

| | |
|---|---|
| **Acute Toxicity** | Based on available data, the classification criteria are not met. |
| **Chronic Toxicity** | Based on available data, the classification criteria are not met. |
| **Respiratory Sensitization** | Based on available data, the classification criteria are not met. |

| | |
|---|---|
| **Serious eye damage/eye irritation** | Based on available data, the classification criteria are not met. |
| **Skin Corrosion/Irritation** | Prolonged or repeated contact may dry skin and cause irritation |
| **Skin Sensitization** | Based on available data, the classification criteria are not met. |
| **Reproductive Toxicity** | Based on available data, the classification criteria are not met. |
| **Carcinogenicity** | Based on available data, the classification criteria are not met. |
| **Specific target organ toxicity - Single exposure** | Based on available data, the classification criteria are not met. |
| **Specific target organ toxicity - Repeated exposure** | Based on available data, the classification criteria are not met. |
| **Mixture versus substance information** | Mixture |

**Information on Likely Routes of Exposure**

| | |
|---|---|
| **Inhalation** | Do not breathe dust<br>May cause irritation of respiratory tract |
| **Ingestion** | Ingestion is not a likely route of exposure |
| **Skin** | Contact with dust can cause mechanical irritation or drying of the skin |
| **Eyes** | Dust contact with the eyes can lead to mechanical irritation |
| **Aspiration hazard** | Not an expected route of exposure. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Irritant effects. Coughing. Discomfort in the chest. Shortness of breath. |

### 11.2. Information on other hazards

| | |
|---|---|
| **11.2.1. Endocrine disrupting properties** | This product does not contain any known or suspected endocrine disruptors |
| **11.2.2. Other information** | Not applicable |

## SECTION 12: Ecological information

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

**Magnesium Hydroxide Surface Treated**

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

**12.2. Persistence and degradability** Not readily biodegradable.

**12.3. Bioaccumulative potential** None.

**Partition coefficient** Not applicable

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

**12.4. Mobility in soil** None.

**12.5. Results of PBT and vPvB assessment** This substance does not meet the criteria for classification as PBT or vPvB.

**12.6. Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors

**12.7. 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 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 Surface Treated**

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

## SECTION 14: Transport information

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

| | |
|---|---|
| **TDG -Canada** | Not regulated |
| **DOT** | Not regulated |
| **ADR** | Not regulated |
| **RID** | Not regulated |
| **ADN** | Not regulated |
| **IATA** | Not regulated |
| **IMDG/IMO** | Not regulated |
| **ICAO** | Not regulated |

**14.1. UN number or ID 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. Maritime transport in bulk according to IMO instruments**
Not applicable

## SECTION 15: Regulatory information

**Global Inventories**

| Chemical Name | CAS Number | EC No | Australia (AIIC) | Canada (DSL) | China (IECSC) | Japan | S. Korea (KECL) | Mexico | Thailand (TECI) | New Zealand | Taiwan | Philippines (PICCS) | TSCA: United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium Hydroxide Surface Treated | 1309-42-8 | 215-170-3 | Y | Y | Y | (1)-386 (ENCS) (ISHL) | KE-22716 | Y | 55-1-01344 | Y | Y | Y | A |

X / Y: Complies ; A: Active ; - / N: Exempt / Not Listed

**US Federal Regulations**

**EPA**

**CERCLA**
Not regulated

**SARA 313**
None

**SARA 302**
Not listed

**SARA 304**
Not listed

**SARA 311/312 Hazardous Categorization**
No

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

| Chemical Name | CAS NUMBER: | California Proposition 65 | Massachusetts | Minnesota | New Jersey | Pennsylvania |
|---|---|---|---|---|---|---|
| Magnesium Hydroxide Surface Treated | Confidential | N | N | N | N | N |

Y: Listed ; N: Not Listed

**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

## SECTION 16: Other information

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**Revision Number** 1.3

**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

**Abbreviations and acronyms**
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG (International Maritime Dangerous Goods)
IUCLID (International Uniform Chemical Information Database)
WHMIS (Workplace Hazardous Materials Information System)
DOT (Department of Transportation)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
TWA (Time-Weighted Average)
CLP (The Classification, Labeling and Packaging of Substances and Mixtures 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)
RQ (Reportable Quantity) (RQ/% in mixture)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
DNEL (Derived No Effect Level)
SVHC (Substances of Very High Concern)
BOD (Biochemical oxygen demand)
COD (Chemical oxygen demand)
ICAO (International Civil Aviation Organization)
IMDG (International Maritime Dangerous Goods)
ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)
SCBA (Self-Contained Breathing Apparatus) Positive Pressure
GHS (Globally Harmonized System)
SARA (Superfund Amendments and Reauthorization Act of 1986)
TSCA (Toxic Substances Control Act)

**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**