



# Safety Data Sheet

FIRE RETARDANT ADDITIVES

## Vertex® 100SA

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  
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: Vertex® 100SA

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

Recommended Use Smoke suppressant Flame retardant

Uses advised against None known.

### 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

### 2.2. Label elements

Symbols/Pictograms None

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**Signal Word** None

**Hazard Statements** None

## Precautionary Statements

**Prevention** 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

**Response** 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

**Storage** Store away from incompatible materials

**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 | EU REACH registration number | OSHA Regulatory Status | WHMIS | Weight-% |
|---------------------|-------------|---------------------|--------------|--------|------------------------------|------------------------|-------|----------|
| Magnesium Hydroxide | 1309-42-8   | A                   | Y            | Y      | 01-211948875<br>6-18-0040    | Not regulated          | --    | -        |
| Surface Treatment   | Proprietary | A                   | Y            | Y      | --                           | Not classified         | --    | <1       |

### Legend

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

## 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.

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**Inhalation** Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**4.2. Most important symptoms and effects, both acute and delayed** Eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed** 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.

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

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

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

**DNEL (Derived No Effect Level)** 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>

**Biological Limit Values** None

### 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).

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## 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>          | 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>Melting point / Freezing point</b> | Not applicable                 |
| <b>Initial boiling point</b>          | No information available       |
| <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>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>Partition coefficient</b>          | Not applicable                 |
| <b>Autoignition Temperature</b>       | Not applicable                 |
| <b>Decomposition Temperature</b>      | 626 °F (330° C)                |
| <b>Viscosity</b>                      | No information available.      |
| <b>Kinematic viscosity</b>            | Not applicable                 |
| <b>Oxidizing Properties</b>           | Not oxidizing                  |
| <b>Particle Size</b>                  | No information available       |
| <b>VOC Content (%)</b>                | Not applicable                 |

### 9.2. Other information

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**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

|   |                                |
|---|--------------------------------|
| <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.

**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. |

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**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** No information available

## Information on Likely Routes of Exposure

**Inhalation** Inhalation of dust may cause irritation of the respiratory system

**Ingestion** Gastrointestinal discomfort

**Skin** Prolonged exposure may cause skin irritation

**Eyes** May cause irritation.

**Aspiration hazard** Based on available data, the classification criteria are not met.

## 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

**WGK Classification (AwSV)** 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)** Not available.

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

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

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## assessment

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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                               |   |
|-------------------------------|---|
| <b>Disposal Methods</b>       | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated Packaging</b> | 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

|                                  |               |
|----------------------------------|---------------|
| <b>European Waste Catalog</b>    | 060299        |
| <b>WGK Classification (AwSV)</b> | 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 |

**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



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**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     | EU REACH registration number  | Australia (AIIIC) | 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<br>8756-18-0<br>040 | Y                 | Y            | Y             | (1)-386<br>(ENCS)<br>(ISHL) | KE-22716        | Y      | Y           | Y                   | Y      | A                   |
| Surface Treatment   | Proprietary | *         | --                            | Y                 | Y            | Y             | Y                           | Y               | Y      | Y           | Y                   | Y      | A                   |

#### Legend

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

### US Federal Regulations

#### EPA

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

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

Legend 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 Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

## SECTION 16: Other information

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

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|-----------------------------------|--|
| <b>Print Date</b>                 | 31/May/2023  |
| <b>Revision Number</b>            | 1.3.1  |
| <b>Reason for Version</b>         | OSHA (Occupational Safety and Health Administration of the US Department of Labor).  |
| <b>Training Advice</b>            | Do not handle until all safety precautions have been read and understood.  |
| <b>Abbreviations and acronyms</b> | IARC (International Agency for Research on Cancer)<br>IATA (International Air Transport Association)<br>IMDG (International Maritime Dangerous Goods)<br>IUCLID (International Uniform Chemical Information Database)<br>WHMIS (Workplace Hazardous Materials Information System)<br>DOT (Department of Transportation)<br>OSHA (Occupational Safety and Health Administration of the US Department of Labor)<br>TWA (Time-Weighted Average)<br>CLP (The Classification, Labeling and Packaging of Substances and Mixtures Regulation (EC 1272/2008))<br>PPE (Personal Protection Equipment)<br>NIOSH (National Institute for Occupational Safety and Health)<br>TDG (Transport of Dangerous Goods) Canada<br>CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)<br>RQ (Reportable Quantity) (RQ/% in mixture)<br>STEL (Short Term Exposure Limit)<br>TLV® (Threshold Limit Value)<br>DNEL (Derived No Effect Level)<br>SVHC (Substances of Very High Concern)<br>BOD (Biochemical oxygen demand)<br>COD (Chemical oxygen demand)<br>ICAO (International Civil Aviation Organization)<br>IMDG (International Maritime Dangerous Goods)<br>ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)<br>RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)<br>SCBA (Self-Contained Breathing Apparatus) Positive Pressure<br>GHS (Globally Harmonized System)<br>SARA (Superfund Amendments and Reauthorization Act of 1986)<br>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**