



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

E-mail 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 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 (CO₂). 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 ³ total dust 5 mg/m ³ respirable
ACGIH	TLV-TWA: 8-hr : 10 mg/m ³ (total dust) 3 mg/m ³ (respirable fraction)
NIOSH	TWA 15 mg/m ³ (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/m³

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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Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing.
Hand Protection	Wear suitable gloves.
Respiratory Protection	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:**

Physical State	Solid Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	8.4-10.2 (5% water suspension)
Melting Point / Melting Range	No information available
Melting point / Freezing point	Not applicable
Initial boiling point	No information available
Freezing Point	Not applicable
Flash Point	Non-combustible
Evaporation Rate	Not applicable.
Flammability (solid, gas)	Not applicable
Upper flammability limit:	--
Lower flammability limit:	--
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Vapor Density	Not applicable
Density	2.4 g/cm ³ , 20°C
Relative Density	
Water Solubility	11.7 mg/l , 25° C
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 oxidizing
Particle Size	No information available
VOC Content (%)	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

10.1. Reactivity	None
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	No specific hazard known
10.4. Conditions to avoid	None known
10.5. Incompatible materials	None known
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.
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11.1. Information on toxicological effects**Magnesium Hydroxide**
Oral LD50

8500 mg/kg Rat

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	Based on available data, the classification criteria are not met
Skin Sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive Toxicity	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

Disposal Methods

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

Contaminated Packaging

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 (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

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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 (AIC)	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	(1)-386 (ENCS) (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

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HUBER

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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.

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