



Vertex® 100 ST1

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® 100 ST1

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.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

Physical Hazards Not classified.

Health Hazards Not classified.

Environmental Hazard Not classified.

2.2. Label elements

Symbols/Pictograms None

Signal Word None

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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 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**Storage** Store away from incompatible materials
Keep in a dry place**Disposal** Disposal should be in accordance with applicable regional, national and local laws and regulations**Hazards not otherwise classified** None known.
(HNOC)

SECTION 3: Composition/information on ingredients

Chemical Name	CAS Number	Weight-%
Magnesium Hydroxide	1309-42-8	-
Surface Treatment	57-11-4	-

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** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Skin Contact** Wash with plenty of soap and water.**Ingestion** Rinse mouth thoroughly with water.**Inhalation** Do not breathe dust. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

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Aspiration hazard

Not an expected route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

May cause irritation to mucous membranes and respiratory tract. 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 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.

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- 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.
- 7.3. Specific end use(s)** See Section 1.2.

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

Surface Treatment

Canada	10 mg/m ³
Canada - Ontario - OEL - TWA EVs	10 mg/m ³ 3 mg/m ³

PNEC (Predicted No Effect Concentration) No information available

DNEL (Derived No Effect Level) No information available

Biological Limit Values No information available

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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

Odor Threshold

No information available

pH:

8.4-10.2 (5% water suspension)

Melting point / Freezing point

Not applicable

Freezing Point

Not applicable

Flash Point

Non-combustible

Evaporation Rate

Not determined.

Flammability (solid, gas)

Not applicable

Upper flammability limit:

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Lower flammability limit:

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Vapor Pressure

Not applicable

Vapor Density

Not applicable

Density

No data available

Relative Density

No data available

Water Solubility

Insoluble

Solubility in other solvents

No data available

Partition coefficient

No data available

Autoignition Temperature

Not applicable

Decomposition Temperature

Not applicable

Viscosity

No information available.

Kinematic viscosity

Not applicable

Oxidizing Properties

Not applicable

Particle Size

No information available

VOC Content (%)

Not applicable

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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	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.

11.1. Information on toxicological effects

Magnesium Hydroxide

LD50s and LC50s

2.1 mg/L Inhalation LC50 Rat 4 h

Oral LD50

8500 mg/kg Rat

Surface Treatment

Oral LD50

4600 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.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Skin Sensitization 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.

Target Organ Effects Based on available data, the classification criteria are not met.

Information on Likely Routes of Exposure

Inhalation	Avoid inhalation of the product
Ingestion	Ingestion is not a likely route of exposure
Skin	Prolonged or repeated contact may dry skin and cause irritation
Eyes	Dust contact with the eyes can lead to mechanical irritation
Aspiration hazard	Not an expected route of exposure.

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

Surface Treatment

WGK Classification (AwSV) 661: WGK: nwg

12.2. Persistence and degradability No data available.

12.3. Bioaccumulative potential No data available.

Partition coefficient No data available

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

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properties

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 (AwSV) 5209 WGK: nwg

Surface Treatment

WGK Classification (AwSV) 661: WGK: nwg

SECTION 14: Transport information

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

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

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

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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 8756-18-0 040	Y	Y	Y	(1)-386 (ENCS) (ISHL)	KE-22716	Y	Y	Y	Y	A
Surface Treatment	57-11-4	-	--	Y	Y	Y	(2)-609 (2)-608 (ENCS)(ISHL)	KE-26333	Y	Y	Y	Y	A

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

US Federal Regulations

EPA

CWA (Clean Water Act)

Not regulated

CAA (Clean Air Act)

Not regulated

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	57-11-4	No	No	No	No	No

Y: Listed ; N: Not Listed

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

Surface Treatment

Combustible Dust

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