



FIRE RETARDANT ADDITIVES

# Safety Data Sheet

## Vertex® 100

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

Pure substance/mixture Substance

Magnesium Hydroxide

CAS Number 1309-42-8

Weight-% 100

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

Recommended Use Flame retardant

Uses advised against None known.

#### 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

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

GHS Classification Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

#### Hazards identification

Physical Hazard Not classified

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Health Hazards Not classified

Environmental Hazard Not classified

## 2.2. Label elements

Symbols/Pictograms None

Signal Word None

Hazard Statements None

## Precautionary Statements

Prevention Employ good industrial hygiene practice  
Do not breathe dust

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 Keep in a dry place.

Disposal Dispose of contents/containers in accordance with local regulations. See Section 13: DISPOSAL CONSIDERATIONS.

2.3. Other hazards No information available.

## SECTION 3: Composition/information on ingredients

Pure substance/mixture Substance

Chemical Name	CAS Number	TSCA: United States	EC No	EU REACH registratio n number	GHS Classificatio n	Weight-%
Magnesium Hydroxide	1309-42-8	A	215-170-3	01-211948 8756-18-0 040.	Not classified	100

## 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.

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<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Inhalation</b>	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Aspiration hazard</b>	Not an expected route of exposure.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Inhalation of dust may cause irritation of the respiratory system. Eye irritation.
<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

<b>5.1. Extinguishing media</b>	
<b>Suitable Extinguishing Media</b>	Use extinguishing agent suitable for type of surrounding fire. Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO2).
<b>Unsuitable Extinguishing Media</b>	Do not use water jetstream.
<b>5.2. Special hazards arising from the substance or mixture</b>	Avoid dust formation. Do not breathe dust.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Wear a self-contained breathing apparatus and chemical protective clothing.
<b>Fire-fighting measures</b>	Standard procedure for chemical fires.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	Keep unauthorized personnel away. Use personal protection recommended in Section 8.
<b>For non-emergency personnel</b>	Keep unauthorized personnel away.

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**For emergency responders**

Keep unauthorized personnel away. Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Avoid runoff to waterways and sewers. Dispose of in accordance with federal, state and local regulations.

**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. Ensure adequate ventilation. Use personal protective equipment as required. 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. See section 10.

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters****Occupational exposure limits****Magnesium Hydroxide**

India

ACGIH

OSHA

TWA: Not established

TLV-TWA: 8-hr : 10 mg/m<sup>3</sup> (total dust)3 mg/m<sup>3</sup> (respirable fraction)TWA: 15 mg/m<sup>3</sup> total dust5 mg/m<sup>3</sup> respirable**Biological Limit Values**

None

**Recommended monitoring procedures**

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

**DNEL (Derived No Effect Level)**

No information available

**PNEC (Predicted No Effect Concentration)**

No information available

**8.2. Exposure controls**

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**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**

<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** Wear suitable protective clothing.

**Hygiene Measures** No information available.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

<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>	Not applicable
<b>Boiling Point</b>	Not applicable
<b>Freezing Point</b>	Not applicable
<b>Flash Point</b>	Non-combustible
<b>Evaporation Rate</b>	Not applicable
<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Density</b>	2.4 g/cm <sup>3</sup> , 20°C
<b>Solubility in other solvents</b>	No information available
<b>Water Solubility</b>	11.7 mg/l , 25° C
<b>Partition coefficient</b>	No data available

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Autoignition Temperature Not applicable  
Oxidizing Properties Not applicable  
Decomposition Temperature 626 °F (330° C)

## 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 Keep away from heat, sparks and flame.  
10.5. Incompatible materials Strong oxidizing agents.  
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.

### Information on Likely Routes of Exposure

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

### 11.1. Information on toxicological effects

#### Magnesium Hydroxide

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.

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<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>Reproductive Effects</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Not listed as a carcinogen.
<b>Specific target organ toxicity - Single exposure</b>	No information available.
<b>Specific target organ toxicity - Repeated exposure</b>	No information available.

## SECTION 12: Ecological information

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

### Magnesium Hydroxide - 1309-42-8

WGK Classification (AwSV) 5209 WGK: nwg

**12.2. Persistence and degradability** Readily biodegradable.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient** No data available.

**Bioconcentration factor (BCF)** Not available.

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

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

**12.6. Other adverse effects** None known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**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

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the product was used

## Disposal Methods

Dispose of waste product or used containers according to local regulations

**Magnesium Hydroxide - 1309-42-8**  
European Waste Catalog 060299

## SECTION 14: Transport information

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

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 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	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	01-211948875 6-18-0040	Y	Y	Y	(1)-386 (ENCS) (ISHL)	KE-22716	Y	Y	Y	Y	A



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

**SECTION 16: Other information**

<b>Prepared by</b>	Huber Engineered Materials Global Regulatory Affairs email: regulatory.affairs@huber.com
<b>Reason for Revision</b>	GHS (Globally Harmonized System).
<b>GHS Classification</b>	This product is not classified as hazardous according to the UN GHS guideline and labeling is not required
<b>Labeling</b>	
<b>Symbols/Pictograms</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None
<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) 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 PNEC (Predicted No Effect Concentration) GHS (Globally Harmonized System) TSCA (Toxic Substances Control Act)
<b>Disclaimer</b>	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

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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**