



FIRE RETARDANT ADDITIVES

# Safety Data Sheet

## Vertex® 100

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006  
COMMISSION REGULATION (EU) No. 2020/878

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

### 1.1. Product identifier

**Product Name:** Vertex® 100  
**Chemical Name** Magnesium Hydroxide  
**Pure substance/mixture** Substance

Chemical Name	CAS Number	EC No	EU REACH registration number	(CLP) Regulation (EC 1272/2008)	Weight-%
Magnesium Hydroxide	1309-42-8	215-170-3	01-2119488756-18-0040	Not classified	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

**E-mail** hubermaterials@huber.com

**1.4. Emergency telephone number** CHEMTREC: +1 800 424 9300 or International +1 703 527 3887

**Poison control center phone number** National Anti-Poison Center UK: +44 844 892 0111 (National Poisons Information Service)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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(CLP) Regulation (EC 1272/2008) Not classified

**Hazards identification****Physical Hazard** 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  
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  
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing  
If swallowed, rinse mouth with water (only if the person is conscious)  
Drink plenty of water**Storage**  
Keep in a dry place  
Store away from incompatible materials**Disposal**  
Disposal should be in accordance with applicable regional, national and local laws and regulations.**2.3. Other hazards** No information available.**SECTION 3: Composition/information on ingredients****3.1. Substance** Substance

Chemical Name	CAS Number	EC No	EU REACH registration number	(CLP) Regulation (EC 1272/2008)	Annex	Weight-%
Magnesium Hydroxide	1309-42-8	215-170-3	01-2119488756-18-0040	Not classified	--	100

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

<b>General Advice</b>	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.
<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>Inhalation</b>	Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Aspiration hazard</b>	Not an expected route of exposure.
<b>Notes to Physician</b>	Treat symptomatically.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
<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****5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing agent suitable for type of surrounding fire. Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media**

None known.

**5.2. Special hazards arising from the substance or mixture**

Non-combustible.

**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.

**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.

**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  
Ensure adequate ventilation  
Handle in accordance with good industrial hygiene and safety practice  
Use personal protective equipment as required**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****ACGIH**TLV-TWA: 8-hr : 10 mg/m<sup>3</sup> (total dust)  
3 mg/m<sup>3</sup> (respirable fraction)**OSHA**TWA: 15 mg/m<sup>3</sup> total dust  
5 mg/m<sup>3</sup> respirable**NIOSH**TWA: 15 mg/m<sup>3</sup> (total dust)

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

**Biological Limit Values** None

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

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

## 8.2. Exposure controls

**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

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** Wear suitable protective clothing.

**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)

**Freezing Point** Not applicable

**Flash Point** Non-combustible

**Evaporation Rate** Not applicable.

**Flammability (solid, gas)** Not applicable

**Upper flammability limit:**

**Lower flammability limit:**

**Vapor Density** Not applicable

**Density** 2.4 g/cm<sup>3</sup>, 20°C

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Relative Density	No data available
Water Solubility	11.7 mg/l , 25° C
Solubility in other solvents	No information available
Partition coefficient	No data available
Autoignition Temperature	Not applicable
Decomposition Temperature	626 °F (330° C)

## 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.
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### 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

<u>Magnesium Hydroxide</u>	
Oral LD50	8500 mg/kg Rat

Acute Toxicity	Based on available data, the classification criteria are not met
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<b>Chronic Toxicity</b>	Based on available data, the classification criteria are not met.
<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

**WGK Classification (AwSV)** 5209 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. Other adverse effects** No information available

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

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<b>Disposal Methods</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Product residue may remain in empty containers. 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

<b>14.1. UN number</b>	None
<b>14.2. UN proper shipping name</b>	None
<b>14.3. Transport hazard class(es)</b>	None
<b>14.4. Packing group</b>	None
<b>14.5. Environmental hazards</b>	No
<b>14.6. Special precautions for user</b>	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**



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Pure substance/mixture

Substance

Chemical Name	CAS Number	EC No	Australia (AIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Thailand (TECI)	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Magnesium Hydroxide	1309-42-8	215-170-3	Y	Y	Y	(1)-386 (ENCS) (ISHL)	KE-22716	Y	55-1-01343	Y	Y	Y	A

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

## REACH No.

### Magnesium Hydroxide

EU REACH registration number 01-2119488756-18-0040

Turkish KKDIK pre-registration 05-0000192735-90-0000

### Germany

Not considered to be harmful to aquatic life

### Magnesium Hydroxide

WGK Classification (AwSV) 5209 WGK: nwg

## 15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance

## SECTION 16: Other information

### Reason for Revision

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15/Nov/2022

Print Date

15/Nov/2022

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(CLP) Regulation (EC 1272/2008) Not classified

### Labeling

Symbols/Pictograms

None

Signal Word

None

Hazard Statements

None.

### Training Advice

Do not handle until all safety precautions have been read and understood.

### Abbreviations and acronyms

IARC (International Agency for Research on Cancer)  
IUCLID (International Uniform Chemical Information Database)

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WHMIS (Workplace Hazardous Materials Information System)  
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)  
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)  
IATA (International Air Transport Association)  
IMDG (International Maritime Dangerous Goods)  
DOT (Department of Transportation)  
TDG (Transport of Dangerous Goods) Canada  
PNEC (Predicted No Effect Concentration)  
SCBA (Self-Contained Breathing Apparatus) Positive Pressure  
GHS (Globally Harmonized System)  
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**