



# Safety Data Sheet

FIRE RETARDANT ADDITIVES

## Vertex® 100

GHS (Globally Harmonized System)

Issue Date 15/Nov/2022  
Print Date 15/Nov/2022

Revision Number 1.4.1

### 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	EU REACH registration number	TSCA: United States	GHS Classification	Weight-%
Magnesium Hydroxide	1309-42-8	01-2119488756-18-0040	A	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:** 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** [huber.europe@huber.com](mailto:huber.europe@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** This product is not classified as hazardous according to the UN GHS guideline and labeling is not required

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet

Vertex® 100

Issue Date 15/Nov/2022

Print Date 15/Nov/2022

Revision Number 1.4.1

Page 2 of 10

### Hazards identification

**Physical Hazard** Not classified.

**Health Hazards** Not classified

**Environmental Hazard** Not classified.

### 2.2. Label elements

**Symbols/Pictograms** None

**Signal Word** 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	EU REACH registration number	GHS Classification	Weight-%
Magnesium Hydroxide	1309-42-8	01-2119488756-18-0040	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.

**Eye Contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet Vertex® 100

Issue Date 15/Nov/2022

Print Date 15/Nov/2022

Revision Number 1.4.1

Page 3 of 10

	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

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet Vertex® 100

Issue Date 15/Nov/2022

Print Date 15/Nov/2022

Revision Number 1.4.1

Page 4 of 10

### 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

### Exposure Limits

Provide adequate ventilation as well as local exhaust at critical locations

#### 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
Australia	Not established
China	TWA: Not established
China	STEL: Not established
India	TWA: Not established
Korea	TWA: Not established
Korea	STEL: Not established
Mexico	TWA/OEL (VLE-PPT): Not established
New Zealand	Not established
Taiwan	OEL: Not established

### Engineering Measures

Do not handle until all safety precautions have been read and understood  
Ensure adequate ventilation, especially in confined areas

## PAGE HEADER-HEM

HUBER

### Safety Data Sheet Vertex® 100

Issue Date 15/Nov/2022

Print Date 15/Nov/2022

Revision Number 1.4.1

Page 5 of 10

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 goggles with side protection

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

**Hand Protection** Protective gloves

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

**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

**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

HUBER

**Safety Data Sheet**  
Vertex® 100

Issue Date 15/Nov/2022  
Print Date 15/Nov/2022

Revision Number 1.4.1  
Page 6 of 10

- 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.

**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.
- 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
- Reproductive Effects** Based on available data, the classification criteria are not met.
- Carcinogenicity** Not listed as a carcinogen.
- Specific target organ toxicity -** No information available.

HUBER

**Safety Data Sheet**  
Vertex® 100

Issue Date 15/Nov/2022  
Print Date 15/Nov/2022

Revision Number 1.4.1  
Page 7 of 10

**Single exposure**

**Specific target organ toxicity - Repeated exposure** - 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**

**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**

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet

Vertex® 100

Issue Date 15/Nov/2022

Print Date 15/Nov/2022

Revision Number 1.4.1

Page 8 of 10

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 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

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

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet Vertex® 100

Issue Date 15/Nov/2022  
Print Date 15/Nov/2022

Revision Number 1.4.1  
Page 9 of 10

### 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

<b>Prepared by</b>	CP Kelco Global Regulatory Affairs Email: Regulatory.Affairs@cpkelco.com.
<b>GHS Classification</b>	This product is not classified as hazardous according to the UN GHS guideline and labeling is not required
<b>Symbols/Pictograms</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None
<b>Hazards identification</b>	
<b>Physical Hazard</b>	Not classified
<b>Health Hazards</b>	Not classified
<b>Environmental Hazard</b>	Not classified
<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

# PAGE HEADER-HEM

HUBER

## Safety Data Sheet Vertex® 100

Issue Date 15/Nov/2022  
Print Date 15/Nov/2022

Revision Number 1.4.1  
Page 10 of 10

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**