



**Kemgard® 928**

**GHS (Globally Harmonized System)**

**Issue Date** 01/Jan/2024

**Print Date** 13/Dec/2023

**Revision Number** 1.4.3

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

### **1.1. Product identifier**

**Product Name:** Kemgard® 928

**Pure substance/mixture** Mixture

**Magnesium Hydroxide**

**CAS Number** 1309-42-8

**Weight-%** >50

**Zinc Molybdenum Oxide**

**CAS Number** 22914-58-5

61583-60-6

**Weight-%** >5

**Surface Treatment**

**CAS Number** Proprietary

**Weight-%** <1

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

**Recommended Use** Flame retardant Smoke suppressant

**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](http://www.huberadvancedmaterials.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** Considered a hazardous substance or mixture according to the Globally Harmonized System (GHS)

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Not classified

**Health Hazards**

Specific target organ toxicity (STOT) - repeated exposure, category 2

**Environmental Hazard**

Chronic Aquatic Toxicity Category 3

**2.2. Label elements****Symbols/Pictograms****Signal Word**

Warning

**Hazard Statements**May cause damage to organs through prolonged or repeated exposure  
Harmful to aquatic life with long lasting effects**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  
Avoid release to the environment**Response**Get medical advice/attention if you feel unwell  
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**

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**

Mixture

Chemical Name	CAS Number	TSCA: United States	EC No	EU REACH registration	GHS Classification	Weight-%

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				n number		
Magnesium Hydroxide	1309-42-8	A	215-170-3	01-211948 8756-18-0 040.	Not classified	>50
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	A	245-322-4	01-212080 0481-68-0 000.	Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	>5
Surface Treatment	Proprietary	A	-	--.	Not classified	<1

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<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.

**4.2. Most important symptoms and effects, both acute and delayed** Inhalation of dust may cause irritation of the respiratory system. Eye irritation.

**4.3. Indication of any immediate medical attention and special treatment needed** 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

Do not use water jetstream.

**5.2. Special hazards arising from** Avoid dust formation. Do not breathe dust.

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the substance or mixture

**5.3. Advice for firefighters****Special protective equipment for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**Fire-fighting measures**

Standard procedure for chemical fires.

## 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.

**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. 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

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## 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

#### Zinc Molybdenum Oxide

India

ACGIH

OSHA

TWA: Not established

TWA: 10 mg/m<sup>3</sup> dust0.5 mg/m<sup>3</sup> Respirable fractionTWA: 5 mg/m<sup>3</sup> (respirable); 10 mg/m<sup>3</sup> (dust)PEL: 5 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

### 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.

#### Hand Protection

Wear suitable gloves.

#### Respiratory Protection

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

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<b>Physical State</b>	Solid. Powder.
<b>Color</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<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
<b>Autoignition Temperature</b>	Not applicable
<b>Oxidizing Properties</b>	Not applicable
<b>Decomposition Temperature</b>	626 °F (330° C)

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	None
<b>10.2. Chemical stability</b>	Stable under normal conditions
<b>10.3. Possibility of hazardous reactions</b>	No specific hazard known
<b>10.4. Conditions to avoid</b>	Keep away from heat, sparks and flame.
<b>10.5. Incompatible materials</b>	Strong oxidizing agents.
<b>10.6. Hazardous decomposition products</b>	None known

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## 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
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

#### Zinc Molybdenum Oxide

Oral LD50 >10000 mg/kg Rat

IARC Not Listed

Target Organ Effects Kidney (based on tubular degeneration/regeneration of male Han Wistar rats at 125 mg/kg/day)

#### Surface Treatment

Oral LD50 2830 µL/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.

**Target Organ Effects** Skin. Eyes. Respiratory system.

**Specific target organ toxicity - Single exposure** No information available.

**Specific target organ toxicity - Repeated exposure** May cause damage to organs through prolonged or repeated exposure if inhaled. Kidney.

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## SECTION 12: Ecological information

**12.1. Ecotoxicity** Harmful to aquatic life with long lasting effects. Avoid release to the environment.

### 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 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



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ICAO	Not regulated
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**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Not applicable

[illegible]

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## SECTION 16: Other information

**Prepared by** Huber Engineered Materials Global Regulatory Affairs  
email: regulatory.affairs@huber.com

**Reason for Revision** GHS (Globally Harmonized System).

**GHS Classification** Considered a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Labeling****Symbols/Pictograms****Signal Word**

Warning

**Hazard Statements**

May cause damage to organs through prolonged or repeated exposure  
Harmful to aquatic life with long lasting effects

**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  
PNEC (Predicted No Effect Concentration)  
GHS (Globally Harmonized System)  
TSCA (Toxic Substances Control Act)

HUBER

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## Disclaimer

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**End of Safety Data Sheet**