



Kemgard® 928

Prepared in accordance with GB/T 16483-2008, GB/T 24774-2009, GB 13690 – 2009, GB/T 17519–2013
GHS (Globally Harmonized System)

Issue Date 01/Jan/2024
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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Kemgard® 928
Pure substance/mixture	Mixture
<u>Magnesium Hydroxide</u>	
CAS Number	1309-42-8
Weight-%	>50
<u>Zinc Molybdenum Oxide</u>	
CAS Number	22914-58-5 61583-60-6
Weight-%	>5
<u>Surface Treatment</u>	
CAS Number	Proprietary
Weight-%	<1
Recommended Use	Flame retardant Smoke suppressant
Uses advised against	None known
Company:	J.M. Huber Corporation 3100 Cumberland Boulevard, Suite 600 Atlanta, GA 30339 USA Tel: +1 678 247-7300
Emergency Telephone	CHEMTREC China: 4001-204937 (Mandarin) Local call: +86 532 5879 2008
E-mail	hubermaterials@huber.com
Internet	www.huberadvancedmaterials.com

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Physical Hazard	Not classified
Health Hazard	Acute toxicity - Inhalation Category 5 Specific target organ toxicity (STOT) - repeated exposure, category 2
Environmental Hazard	Chronic Aquatic Toxicity, Category 3

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Acute Aquatic Toxicity Category 2

Label Elements

Symbols/Pictograms



Signal Word

Warning

Hazard Statement

May be harmful if inhaled
May cause damage to organs through prolonged or repeated exposure
Toxic to aquatic life
Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention

Observe good industrial hygiene practices.
Avoid breathing dust.
Use mechanical ventilation (dilution and local exhaust) to control exposure
Avoid release to the environment

Response

Get medical help if you feel unwell
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
IF INHALED: Get medical help.

Spills and Leaks

Collect spillage

Storage

Store in a dry place
Store away from incompatible materials.

Disposal

Dispose in accordance with local, state and national regulations

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Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture

Mixture

Chemical Name	CAS Number	China (IECSC)	China classification	TSCA: United States	EU REACH registration number	Weight-%
Magnesium Hydroxide	1309-42-8	Y	Not classified as a dangerous goods/substances	A	01-2119488756-18-0040	>50
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	Y	Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	A	01-2120800481-68-0000	>5
Surface Treatment	Proprietary	Y	Not classified	A	--	<1

Section 4: FIRST AID MEASURES

General Advice	In case of doubt or when symptoms persist, seek medical attention.
Eye Contact	Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes.
Skin Contact	Wash skin with soap and water
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
Notes to Physician	Treat symptomatically
Personal Protective Equipment For First Aid Responders	Wear suitable protective clothing IF exposed or concerned: Get medical advice/attention
Expected acute symptoms and delayed symptoms	None known

Section 5: FIRE FIGHTING MEASURES

Flammable Properties	None known
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	None known

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Specific Hazards Arising from the Chemical	None known
Unusual fire & explosion hazards:	None
Protective measures:	Use protective equipment that is appropriate for surrounding materials.
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit

Section 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Avoid dust formation. Avoid inhalation of dust. Refer to Section 8 for personal protective equipment.
Environmental Precautions	Prevent from entering into soil, ditches, sewers and waterways.
Methods for cleaning up	Sweep or vacuum spilled material Dispose of according to local and regional authority requirements
Other Information:	None known

Section 7: HANDLING AND STORAGE

Handling	In case of exposure to environments exceeding the occupational exposure limit, wear a respirator in compliance with national legislation. Handle in accordance with good industrial hygiene and safety practice.
Storage	Keep container tightly closed in a dry and well-ventilated place

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	Provide adequate ventilation as well as local exhaust at critical locations
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Magnesium Hydroxide

China	TWA: Not established
China	STEL: Not established
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)
OSHA	TWA: 15 mg/m ³ total dust 5 mg/m ³ respirable

Zinc Molybdenum Oxide

China	TWA: 8-hour: 4 mg/m ³
China	STEL: Not established
ACGIH	TWA: 10 mg/m ³ dust 0.5 mg/m ³ Respirable fraction
NIOSH	TWA 8-hr: 10 mg/m ³
OSHA	TWA: 5 mg/m ³ (respirable); 10 mg/m ³ (dust) PEL: 5 mg/m ³ (respirable)

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

Information on basic physical and chemical properties

Appearance:

Physical State	Solid Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
Freezing Point	Not applicable
Flash Point	Non-combustible.
Evaporation Rate	Not applicable
Upper flammability limit:	
Lower flammability limit:	
Vapor Density	Not applicable
Density	2.4 g/cm ³ , 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

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Stability	Stable under normal conditions
Conditions to avoid:	None
Incompatible materials	None known
Hazardous decomposition products	None under normal processing
Hazardous Reactions	None under normal processing
Hazardous polymerization:	None under normal processing

Section 11: TOXICOLOGICAL INFORMATION

General Information Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Product Information

Information on Likely Routes of Exposure

Eyes	Dust contact with the eyes can lead to mechanical irritation
Skin	Prolonged or repeated contact may dry skin and cause irritation
Inhalation	Avoid inhalation of the product
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

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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
Respiratory Sensitization	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.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic life with long lasting effects. Avoid release to the environment.
Persistence/Degradability:	No data available.
Bioaccumulative Potential	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
Partition coefficient	No data available
Bioconcentration factor (BCF)	No data available.
Mobility in soil	No data available.
Results of PBT and vPvB assessment	This substance does not meet the criteria for classification as PBT or vPvB.
Other Adverse Effects	None known

Section 13: DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products	Dispose of in accordance with local regulations
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Contaminated Packaging: Dispose of contents/container to an approved waste disposal plant

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
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	01-212080048 1-68-0000	N	Y: DSL-229 14-58 -5 NDSL: 61583-60	Y	(1)-781 (ENCS)(ISHL)	KE-11910	Y: (MO-generics)	Y	Y	Y	A

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Section 16: OTHER INFORMATION

Prepared by Huber Engineered Materials Global Regulatory Affairs
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Reason for Revision GB/T 16483-2008
GB/T 24774-2009
GB 13690 – 2009
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GHS Classification

Physical Hazard Not classified

Health Hazard Acute toxicity - Inhalation Category 5
Specific target organ toxicity (STOT) - repeated exposure, category 2

Environmental Hazard Chronic Aquatic Toxicity, Category 3
Acute Aquatic Toxicity Category 2

Label Elements

Symbols/Pictograms



Signal Word Warning

Hazard Statement May be harmful if inhaled
May cause damage to organs through prolonged or repeated exposure
Toxic to aquatic life
Harmful to aquatic life with long lasting effects

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)

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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)
SCBA (Self-Contained Breathing Apparatus) Positive Pressure
GHS (Globally Harmonized System)
ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)
SARA (Superfund Amendments and Reauthorization Act of 1986)
TSCA (Toxic Substances Control Act)

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End of Safety Data Sheet