



Kemgard® 928

**Japan-JIS Z 7253:2019
Occupational Safety and Health Act
GHS (Globally Harmonized System)**

Issue Date 01/Jan/2024
Print Date 13/Dec/2023

Revision Number 1.4.3
Page 1 of 8

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
Internet	www.huberadvancedmaterials.com
E-mail	hubermaterials@huber.com
Emergency Telephone Number	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887 +81 03-3560-7316

2. HAZARD IDENTIFICATION

Japan GHS Classification	
Physical Hazards	Not classified
Health Hazard	Specific target organ toxicity (STOT) - repeated exposure, category 2
Environmental Hazards	Chronic Aquatic Toxicity, Category 3
GHS label elements	
Symbols/Pictograms	

Safety Data Sheet

Kemgard® 928

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.4.3

Page 2 of 8

**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 breathe vapor or mist
Employ good industrial hygiene practice
Wash hands thoroughly after handling
Avoid release to the environment

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
Get medical help if you feel unwell

Storage

Store away from incompatible materials.
Keep in a dry place

Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture

Mixture

Chemical Name	CAS Number	Japan GHS Classification	Weight-%
Magnesium Hydroxide	1309-42-8	Not classified	>50
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	>5
Surface Treatment	Proprietary	Not classified	<1

4. FIRST AID MEASURES

If inhaled:

Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN:

Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse

IF IN EYES:

In case of eye contact, remove contact lens and rinse immediately with plenty of

Safety Data Sheet

Kemgard® 928**Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.4.3**Page 3 of 8**

water, also under the eyelids, for at least 15 minutes

Call a physician if irritation develops and persists

If swallowed: Rinse mouth thoroughly with water**Self-Protection of the First Aider** Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves**Notes to Physician** Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water spray (fog)
Foam
Dry chemical
Carbon dioxide (CO₂)**Unsuitable Extinguishing Media** Do not use water jetstream**Special hazards arising from the substance or mixture** Avoid dust formation**Fire-fighting measures** In case of fire and/or explosion do not breathe fumes
Water mist may be used to cool closed containers
Keep unauthorized personnel away**Special Protective Equipment for Firefighters** Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment and Precautions for Firefighters Avoid dust formation
Ensure adequate ventilation
Use personal protection recommended in Section 8
Avoid contact with eyes and skin. Wear suitable personal protection equipment.
Keep unauthorized personnel away**Environmental Precautions** Keep out of drains, sewers, ditches and waterways
Disposal considerations
See section 13 for more information**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 Minimize use of water during clean-up
Recommended filter type: High efficiency particulate air filter (HEPA filter)**Other Information** Not applicable

7. HANDLING AND STORAGE

Safety Data Sheet

Kemgard® 928

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.4.3

Page 4 of 8

Handling**Technical measures**

Provide adequate ventilation as well as local exhaust at critical locations
Ensure adequate ventilation
Use personal protection equipment
See section 8 for more information

Advice on safe handling

Minimize dust generation and accumulation

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place

Hygiene Measures

Wash hands thoroughly after handling

Storage**Packaging compatibilities**

Keep/store only in original container

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Provide adequate ventilation as well as local exhaust at critical locations

Magnesium Hydroxide

Japan

Not established

Zinc Molybdenum Oxide

Japan

Not established

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment**Respiratory Protection**

In case of inadequate ventilation wear respiratory protection

Hand protection

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn

Eye Protection

Wear safety glasses with side shields (or goggles)

Skin and Body Protection

Wear suitable protective clothing.
Chemical resistant apron.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice
Wash thoroughly after handling
Avoid contact with eyes and skin
Do not breathe dust

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid, Powder

Color

White

Odor

Odorless

Odor Threshold

No information available

Melting Point / Melting Range

No data available

Boiling Point

No data available

Freezing Point

Not applicable

Autoignition Temperature

Not applicable

Safety Data Sheet

Kemgard® 928**Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.4.3**Page 5 of 8**

Evaporation Rate	Not applicable
Flammability (solid, gas)	No data available
Explosive Properties	No data available
Vapor Pressure	No data available
Water Solubility	11.7 mg/l , 25° C
Partition coefficient	No data available
Viscosity	No data available
Specific Gravity	No data available
Oxidizing Properties	No data available
Decomposition Temperature	626 °F (330° C)
Flash Point	Non-combustible.
Vapor Density	Not applicable
Density	2.4 g/cm ³ , 20°C
Relative Density	No data available
Solubility in other solvents	No information available

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	None known
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	None known

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
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

Safety Data Sheet

Kemgard® 928**Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.4.3**Page 6 of 8**

Oral LD50	8500 mg/kg Rat
<u>Zinc Molybdenum Oxide</u>	
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)
<u>Surface Treatment</u>	
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.
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.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic life with long lasting effects
Persistence and degradability	No data available
Bioaccumulation	No data available.
Mobility in soil	No data available
Hazardous to the ozone layer	No data available

13. DISPOSAL CONSIDERATIONS

Disposal	Dispose of in accordance with federal, state and local regulations
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

Safety Data Sheet

Kemgard® 928

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.4.3

Page 7 of 8

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

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

15. REGULATORY INFORMATION

Global Inventories

Pure substance/mixture

Mixture

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	01-211948 8756-18-0 040	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	01-212080 0481-68-0 000	N	Y: DSL-2291 4-58 -5 NDSL: 61583-60- 6	Y	(1)-781 (ENCS)(ISHL)	KE-11910	Y: (MO-gene rics)	Y	Y	Y	A
Surface Treatment	Proprietary	-	--	Y	Y	Y	Y	Y	Y	Y	Y	Y	A

Legend-Inventories

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Safety Data Sheet

Kemgard® 928**Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.4.3**Page 8 of 8**

AICS - Australian Inventory of Chemical Substances
TSCA (Toxic Substances Control Act)
DSL (Domestic Substance List)
NDSL (Non-Domestic Substances List)
Japan - ISHL Notifiable Substances
ENCS - Japan Existing and New Chemical Substances

Zinc Molybdenum Oxide

Japanese Pollutant Release and Transfer Register - Class 1 Substance :453 >= 1.0%

16. OTHER INFORMATION

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Reason for Revision

This SDS complies with the requirements of JIS Z 7250:2010 and JIS Z 7252:2009 (Japan)

Bibliography

NITE GHS Classified list
Japan Society for occupational health (2015) recommendation of allowable concentrations, etc.
ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value

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)

Disclaimer

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End of Safety Data Sheet