



Kemgard® 928

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

Issue Date 01/Jan/2024
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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.

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-generics) | 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

| | |
|-----------------------------------|---|
| Prepared by | Huber Engineered Materials Global Regulatory Affairs email: regulatory.affairs@huber.com |
| 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) |
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End of Safety Data Sheet