Safety Data Sheet

Kemgard® 1100

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) No. 2020/878

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

1.1. Product identifier

Product Name:	**Kemgard® 1100**
Pure substance/mixture	Mixture

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 Cumberland Boulevard, Suite 600 , GA 30339 USA : +1 678 247-7300
Internet	www.huberadvancedmaterials.com
Contact E-Mail	www.huberadvancedmaterials.com/contact
E-mail	hubermaterials@huber.com

1.4. Emergency telephone number	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887
Poison control center phone number	National Anti-Poison Center UK: +44 844 892 0111 (National Poisons Information Service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

(CLP) Regulation (EC 1272/2008) This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]

Hazards identification

Physical Hazard	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
H373 - May cause damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention
P260 - Do not breathe dust
P273 - Avoid release to the environment
Employ good industrial hygiene practice
Wash hands thoroughly after handling

Response
P314 - 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
Store away from incompatible materials

Disposal
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Additional Information: Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1).

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixture

Mixture

Chemical Name	CAS Number	EC No	(CLP) Regulation (EC 1272/2008)	Weight-%
Talc	14807-96-6	238-877-9	Not classified.	75 - 90
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 2, H411.	10 - 25
Crystalline Silica, quartz (impurity)	14808-60-7	238-878-4	Carcinogenicity category	<0.1

			1A. Specific target organ toxicity (STOT) - repeated exposure, category 2. :. Respiratory system.	

Additional information
Exempt or - : this substance or its uses are exempted from REACH registration or no REACH registration obligation as annual tonnage <1tpa. TSCA A: Component is listed on Inventory as Active

SECTION 4: First aid measures

4.1. Description of first aid measures

General Advice When in doubt or if symptoms are observed, get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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

Skin Contact Wash with plenty of soap and water.

Inhalation Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water.

Aspiration hazard Not an expected route of exposure.

Notes to Physician Treat symptomatically.

4.2. Most important symptoms and effects, both acute and delayed Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.

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 (CO2).

Unsuitable Extinguishing Media
Do not use water jetstream.

5.2. Special hazards arising from the substance or mixture
Heating can release hazardous gases.

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

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

8.1. Control parameters

Occupational exposure limits

Talc

ACGIH	TWA: 2 mg/m³ (respirable dust)
OSHA	TWA: 20 mppcf
Austria	MAK: 2 mg/m³ (respirable fraction)
Belgium	TWA: 2 mg/m³
Bulgaria	TWA: 1 fibers/cm3 (respirable fraction) 6 mg/m³ (inhalable fraction) 3 mg/m³ (respirable fraction)
Croatia	MAC: 1 mg/m³
Cyprus	TWA: 706 particle/m³
Czech Republic	TWA: 10 mg/m³ (respirable dust) 10 mg/m³ (total dust)
Greece	TWA: 2 mg/m³ (respirable); 10 mg/m³ (inhalable)
Hungary	TWA: 2 mg/m³ (respirable)
Ireland	TWA: 10 mg/m³ (total inhalable dust) 0,8 mg/m³ (respirable dust)
Italy	TWA: 2 mg/m³ (respirable fraction)
Italy	TWA: 2 mg/m³ (respirable fraction)
Lithuania	TWA: 2 mg/m³ (inhalable fraction) 1 mg/m³ (respirable fraction)
Netherlands	TWA: 0,25 mg/m³ (respirable dust)
Norway	TLV: 6 mg/m³ (total dust) 2 mg/m³ (respirable dust)
Poland	TWA: 4 mg/m³ (total dust) 1 mg/m³ (respirable dust)
Portugal	TWA: 2 mg/m³ (respirable fraction)
Slovakia	TWA: 2 mg/m³ (respirable fraction) 10 mg/m³ (total)
Slovenia	TWA: 2 mg/m³ (respirable fraction)
Spain	TWA: 2 mg/m³ (respirable fraction)
Sweden	TWA: 2 mg/m³ (total dust) 1 mg/m³ (respirable dust)
Switzerland	TWA: 2 mg/m³ (respirable dust)
United Kingdom	TWA: 1 mg/m³ (respirable dust)

Zinc Molybdenum Oxide

ACGIH	TWA: 10 mg/m³ dust 0.5 mg/m³ Respirable fraction
OSHA	TWA: 5 mg/m³ (respirable); 10 mg/m³ (dust) PEL: 5 mg/m³ (respirable)
NIOSH	8-hr TWA: 10 mg/m³
Bulgaria	TWA: 10 mg/m³
Czech Republic	Ceiling: 25mg/m³ TWA: 5 mg/m³
Estonia	TWA: 5 mg/m³ (respirable dust) 10 mg/m³ (total dust)
Estonia	STEL: 0.5 mg/m³
Finland	TWA: 0,5 mg/m³
France	VLE: 10 mg/m³ VME: 5 mg/m³

Germany	DFG MAK: TWA: 2 mg/m³ (inhalable fraction) 0,1 mg/m³ (respirable fraction)
Poland	STEL: 10 mg/m³ TWA: 4 mg/m³
Poland	STEL 10 mg/m³
Slovakia	TWA 2 mg/m³ Inhalable fraction 0,1 mg/m³ Respirable fraction
Slovenia	TWA: 5 mg/m³ (inhalable fraction)
Spain	STEL 10 mg/m³ Respirable fraction
Crystalline Silica, quartz (impurity)	
ACGIH	TWA: 0.025 mg/m³ respirable fraction
OSHA	TWA: 0.05 mg/m³ OSHA Action level: 0.025 mg/m³
NIOSH	0.05 mg/m³ TWA (respirable dust)
Austria	MAK: 0,15 mg/m³ (respirable dust)
Belgium	TWA: 0,1 mg/m³ (respirable dust)
Bulgaria	TWA: 0,07 mg/m³ (respirable fraction)
Croatia	MAC: 0,1 mg/m³
Czech Republic	TWA: 0,1 mg/m³ (respirable dust)
Denmark	TLV 0,3 mg/m³ (total) 0,1 mg/m³ (respirable)
Estonia	TWA: 0,1 mg/m³ (respirable dust)
Finland	TWA: 0,05 mg/m³ (respirable)
France	VME: 0,1 mg/m³ (restrictive limit, alveolar fraction)
Hungary	TWA: 0,15 mg/m³ (respirable)
Iceland	TWA: 0,3 mg/m³ (total dust) 0,1 mg/m³ (respirable dust)
Ireland	TWA: 0,1 mg/m³ (respirable dust)
Italy	TWA: 0,025 mg/m³ (respirable fraction)
Italy	TWA: 0,025 mg/m³ (respirable fraction)
Lithuania	TWA: 0,1 mg/m³ (respirable fraction)
Netherlands	TWA: 0,075 mg/m³ (respirable dust)
Norway	TLV: 0,3 mg/m³ (total dust) 0,1 mg/m³ (respirable dust)
Poland	TWA: 2 mg/m³ (total dust) 0,3 mg/m³ (respirable dust)
Portugal	TWA: 0,025 mg/m³ (respirable fraction)
Slovakia	TWA: 0,1 mg/m³ (respirable fraction)
Slovenia	TWA: 0,15 mg/m³ (respirable fraction)
Spain	VLA-ED TWA: 0,1 mg/m³ (respirable fraction)
Sweden	TWA: 0,1 mg/m³ (respirable dust)
Switzerland	TWA: 1, 15 mg/m³ (respirable dust)
United Kingdom	TWA: 0,1 mg/m³ (respirable)

Recommended monitoring procedures Refer also to national guidance documents for information on currently recommended monitoring procedures

Biological Limit Values None

DNEL (Derived No Effect Level) No data 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.
Thermal hazards	None known.
Hygiene Measures	Follow general hygiene considerations recognized as common good workplace practices
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:	6.5
Melting Point / Melting Range	No information available
Melting point / Freezing point	Not applicable
Initial boiling point	No information available
Boiling Point	No information available
Freezing Point	No information available
Flash Point	No data available
Evaporation Rate	Not applicable.
Flammability (solid, gas)	Not applicable
Upper flammability limit:	--
Lower flammability limit:	--
Vapor Pressure	No data available
Vapor Density	Not applicable
Vapor Density	No data available
Density	No data available
Relative Density	2.8 g/cm³
Water Solubility	Slightly soluble
Solubility in other solvents	No information available

Partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No information available
Viscosity	No information available.
Kinematic viscosity	Not applicable
Oxidizing Properties	Not applicable
Particle Size	No information available
Molecular Weight	Not available
Molecular Weight	Not available
Specific Gravity	2.8 (H2O = 1)
VOC Content (%)	0%

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity	Stable under normal conditions
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	None under normal processing
10.4. Conditions to avoid	Incompatible materials Dust formation
10.5. Incompatible materials	Strong oxidizing agents Strong acids
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.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Talc

NTP (National Toxicology Program)	male rat-some evidence; female rat-clear evidence; male mice-no evidence; female mice-no evidence

Zinc Molybdenum Oxide

Oral LD50	>10000 mg/kg Rat
IARC	Not Listed
Specific target organ toxicity - Repeated exposure	Kidney (based on tubular degeneration/regeneration of male Han Wistar rats at 125 mg/kg/day). NOAEL – 60 mg/kg Rat; Oral; 90-day.

Crystalline Silica, quartz (impurity)

LD50s and LC50s	500 mg/kg Oral LD50 Rat
Oral LD50	500 mg/kg Rat Mouse
ACGIH	Group 2A - Probably Carcinogenic to Humans
IARC	Group 1 - Carcinogenic to Humans

Acute Toxicity	Avoid inhalation of dust. Product dust may be irritating to eyes, skin and respiratory system
Reproductive Toxicity	No data available.
Carcinogenicity	Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1).
Target Organ Effects	Skin. Eyes. Respiratory system.
Specific target organ toxicity - Single exposure	No data available.
Specific target organ toxicity - Repeated exposure	May cause damage to organs through prolonged or repeated exposure if inhaled. Kidney.

Information on Likely Routes of Exposure

Inhalation	Avoid inhalation of the product
Ingestion	Ingestion is not a likely route of exposure
Skin	Prolonged or repeated contact may dry skin and cause irritation
Eyes	Dust contact with the eyes can lead to mechanical irritation
Aspiration hazard	Not an expected route of exposure.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties	This product does not contain any known or suspected endocrine disruptors
11.2.2. Other information	Not applicable

SECTION 12: Ecological information

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

Talc
WGK Classification (AwSV) 1315 WGK: nwg
Crystalline Silica, quartz (impurity)
WGK Classification (AwSV) 849 WGK: nwg

12.2. Persistence and degradability Not readily biodegradable.

12.3. Bioaccumulative potential No information available.

Partition coefficient No data available

Bioconcentration factor (BCF) No data available.

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors

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

Talc
WGK Classification (AwSV) 1315 WGK: nwg
Crystalline Silica, quartz (impurity)
WGK Classification (AwSV) 849 WGK: nwg

SECTION 14: Transport information

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

TDG -Canada	Not regulated
DOT	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
ICAO	Not regulated

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. Maritime transport in bulk according to IMO instruments
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 Mixture

Chemical Name	CAS Number	EC No	Australia (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Thailand (TECI)	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Talc	14807-96-6	238-877-9	Y	Y	Y	(1)-468 (ENCS)(ISHL)	KE-32773	Y	55-1-01940	Y	Y	Y	A
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	N	Y	Y	(1)-781 (ENCS)(ISHL)	KE-11910	N	Y	N	N	Y	A
Crystalline Silica, quartz (impurity)	14808-60-7	238-878-4	Y	Y	Y	(1)-548(ENCS)(ISHL)	KE-29983	Y	55-1-01941	Y	Y	Y	A

Talc
EU REACH registration number Exempt
Zinc Molybdenum Oxide
EU REACH registration number 01-2120800481-68-0000
Turkish KKDIK pre-registration 05-0000192714-03-0000

Crystalline Silica, quartz (impurity)
EU REACH registration number Exempt

Germany
Harmful to aquatic life with long lasting effects Avoid release to the environment

Talc
WGK Classification (AwSV) 1315 WGK: nwg

Crystalline Silica, quartz (impurity)
WGK Classification (AwSV) 849 WGK: nwg

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance

SECTION 16: Other information

Reason for Revision	This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 & COMMISSION REGULATION (EU) No. 2020/878
Issue Date	01/Jan/2024
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Prepared by	Huber Engineered Materials Global Regulatory Affairs (Email – HEM.FRARegulatory@huber.com).
(CLP) Regulation (EC 1272/2008)	This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]

Labeling

Symbols/Pictograms

Signal Word	Warning
Hazard Statements	H373 - May cause damage to organs through prolonged or repeated exposure. H412 - 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) IUCLID (International Uniform Chemical Information Database) WHMIS (Workplace Hazardous Materials Information System) 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)
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)
IATA (International Air Transport Association)
IMDG (International Maritime Dangerous Goods)
DOT (Department of Transportation)
TDG (Transport of Dangerous Goods) Canada
PNEC (Predicted No Effect Concentration)
SCBA (Self-Contained Breathing Apparatus) Positive Pressure
GHS (Globally Harmonized System)
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