Safety Data Sheet

Kemgard® 605

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

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Kemgard® 605
Pure substance/mixture	Mixture
Aluminum Hydroxide	
CAS Number	21645-51-2
Weight-%	> 75
Zinc Molybdenum Oxide	
CAS Number	22914-58-5 61583-60-6
Weight-%	< 25
Recommended Use	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
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Section 2: HAZARDS IDENTIFICATION

GHS Classification	Not classified
Physical Hazard	Not classified
Health Hazard	Acute toxicity - Inhalation Category 5
Environmental Hazard	Acute Aquatic Toxicity Category 2 Chronic Aquatic Toxicity, Category 3
Label Elements	
Symbols/Pictograms	None

Signal Word	Warning
Hazard Statement	May be harmful if inhaled Toxic to aquatic life Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention	Avoid release to the environment Employ good industrial hygiene practice Wash hands thoroughly after handling
Response	IF INHALED: Get medical help.
Spills and Leaks	Collect spillage
Storage	Store in a dry place Store away from incompatible materials.
Disposal	Disposal should be in accordance with applicable regional, national and local laws and regulations
General Advice	None

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-%
Aluminum Hydroxide	21645-51-2	Y	Not classified	A	01-2119529246-39	> 75
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	< 25

Section 4: FIRST AID MEASURES

General Advice	None
Eye Contact	Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes.
Skin Contact	IF ON SKIN: Wash with plenty of soap and water

Inhalation	If symptoms occur, remove person to fresh air.
Ingestion	Do not induce vomiting without medical advice
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	All extinguishing media can be used. Use suitable media appropriate for the surrounding fire.
Unsuitable extinguishing media:	None known
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
Environmental Precautions	Prevent from entering into soil, ditches, sewers and waterways.
Methods for cleaning up	Sweep or vacuum spilled material Transfer the material to appropriate containers for reclamation or disposal
Other Information:	None known

Section 7: HANDLING AND STORAGE

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. Do not breathe dust. Ensure adequate ventilation. Wear appropriate personal protective clothing to prevent skin contact. Handle in accordance with good industrial hygiene and safety practice.

Storage

Keep containers tightly closed.
Dry storage.
Store away from incompatible materials.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Provide adequate ventilation as well as local exhaustion at critical locations

Aluminum Hydroxide

ACGIH	TLV/TWA 8-hr: 1 mg/m³ (respirable fraction)
NIOSH	TWA: 5 mg/m³ (respirable dust); 10 mg/m³ TWA (total dust)
OSHA	TWA: 15 mg/m³ (Total Dust) 5 mg/m³ (Respirable Dust)

Zinc Molybdenum Oxide

China	TWA: 8-hour: 4 mg/m³
China	STEL: Not established
ACGIH	TWA: 10 mg/m³ dust 0.5 mg/m³ Respirable fraction
NIOSH	8-hr TWA: 10 mg/m³
OSHA	TWA: 5 mg/m³ (respirable); 10 mg/m³ (dust) PEL: 5 mg/m³ (respirable)

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

Wash off with soap and water. 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 to off-white
Odor	Odorless
Odor Threshold	No information available
pH:	8.4 (5% water suspension)
Melting Point / Melting Range	Not applicable
Freezing Point	Not applicable
Boiling Point	Not applicable
Flash Point	Non-combustible.
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper flammability limit:	
Lower flammability limit:	
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Density	2.5 – 2.7 g/cm3, 20ºC
Relative Density	2.6 g/cm3, 20º C
Water Solubility	11.7 mg/l , 25° C
Solubility in other solvents	No data available
Partition coefficient	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	No data available
Viscosity	Not applicable.

Section 10: STABILITY AND REACTIVITY

Stability	Stable
Conditions to avoid:	Dust formation Incompatible materials
Incompatible materials	None known
Hazardous decomposition products	None known
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	Contact with dust can cause mechanical irritation or drying of the skin
Inhalation	Inhalation of dust may cause irritation of the respiratory system
Ingestion	Ingestion is not a likely route of exposure
Aspiration hazard	Not an expected route of exposure.

11.1. Information on toxicological effects

Aluminum Hydroxide

Oral LD50	> 2000 mg/kg Rat
Inhalation LC50	Rat > 2.3 mg/l (Al2O3) Aerosol Maximum attainable concentration
IARC	Not Listed

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.

Acute Toxicity	No data available
Serious eye damage/eye irritation	Dust may cause mechanical irritation to eyes
Respiratory Sensitization	Inhalation of dust in high concentration may cause irritation of respiratory system.
Skin Corrosion/Irritation	Prolonged or repeated contact may dry skin and cause irritation
Skin Sensitization	Not a skin sensitizer
Mutagenicity	No data available.
Reproductive Effects	This product does not contain any known or suspected reproductive hazards.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Target Organ Effects	No data available.
Specific target organ toxicity - Single exposure	No data available.
Specific target organ toxicity -	No data available.

Repeated exposure

Mixture versus substance information Mixture.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life with long lasting effects.

Persistence/Degradability: No data available.

Bioaccumulative Potential This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Partition coefficient Not applicable
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

Contaminated Packaging: Dispose of container and unused contents in accordance with federal, state and local requirements

Section 14: TRANSPORT INFORMATION

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

DOT 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

Subsidiary Risk -

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 (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Aluminum Hydroxide	21645-51-2	244-492-7	01-2119529246-39	Y	Y	Y	(1)-17 (ENCS); ISHL	KE-00980	Y	Y	Y	Y	A
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	01-2120800481-68-0000	N	Y	Y	(1)-781 (ENCS)(ISHL)	KE-11910	N	N	N	Y	A

X / Y: Complies ; A: Active ; - / N: Exempt / Not Listed

Section 16: OTHER INFORMATION

Prepared by	Huber Engineered Materials Global Regulatory Affairs email: regulatory.affairs@huber.com
Reason for Revision	GB/T 16483-2008 GB/T 24774-2009 GB 13690 – 2009 GB/T 17519–2013
GHS Classification	Not classified
Physical Hazard	Not classified
Health Hazard	Acute toxicity - Inhalation Category 5
Environmental Hazard	Acute Aquatic Toxicity Category 2 Chronic Aquatic Toxicity, Category 3
Label Elements	
Symbols/Pictograms	None
Signal Word	Warning
Hazard Statement	May be harmful if inhaled 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) 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)

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