ADVANCED

Safety Data Sheet

Kemgard® 605

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03 Canadian Workplace Hazardous Material Information System (WHMIS) 2015 Mexico NOM-018-STPS-2000; NOM-018-STPS-2015 GHS (Globally Harmonized System)

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

1.1. Product identifier

Product Name: Kemgard® 605

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Smoke suppressant

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company: J.M. Huber Corporation

3100 Cumberland Boulevard, Suite 600

Atlanta, GA 30339 USA Tel: +1 678 247-7300

www.huberadvancedmaterials.com Internet

Contact E-Mail www.huberadvancedmaterials.com/contact

1.4. Emergency telephone

number

CHEMTREC: +1 800 424 9300 or International +1 703 527 3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This material is considered hazardous by the OSHA Hazard Communication **OSHA Regulatory Status**

Standard (29 CFR 1910.1200)

Physical Hazards Not classified

Specific target organ toxicity (STOT) - repeated exposure, category 2 **Health Hazards**

Not classified **Environmental Hazard**

2.2. Label elements

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Symbols/Pictograms



Signal Word Warning

Hazard Statements H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

Prevention Do not breathe dust

Employ good industrial hygiene practice Wash hands thoroughly after handling

Do not handle until all safety precautions have been read and understood

Take precautionary measures against static discharges

Response Get medical advice/attention if you feel unwell

Storage Keep in a dry place

Store away from incompatible materials

Collect spillage

Disposal Disposal should be in accordance with applicable regional, national and local laws

and regulations

Hazards not otherwise classified None known. **(HNOC)**

SECTION 3: Composition/information on ingredients

Pure substance/mixture Mixture

Chemical Name	CAS Number	Weight-%
Zinc Molybdenum Oxide	22914-58-5	< 25
	61583-60-6	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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General Advice Do not handle until all safety precautions have been read and understood. Employ

> good industrial hygiene practice. Wear suitable protective clothing, gloves and eye/face protection. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. When in doubt or if

symptoms are observed, get medical advice.

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

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

Skin Contact Wash with plenty of soap and water.

Rinse mouth thoroughly with water. Ingestion

Inhalation Do not breathe dust. If breathing is difficult, remove victim to fresh air and keep at

rest in a position comfortable for breathing.

Not an expected route of exposure. **Aspiration hazard**

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.

medical attention and special

treatment needed

4.3. Indication of any immediate Treatment should be symptomatic and supportive. 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

Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO2).

Unsuitable Extinguishing Media

None known.

5.2. Special hazards arising from the substance or mixture

None known.

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. No special fire protection measures are necessary. Standard procedure for chemical fires.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away. Avoid dust formation. Ensure adequate

ventilation. Use personal protection recommended in Section 8.

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. 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.

including any incompatibilities

7.2. Conditions for safe storage. Keep container tightly closed and dry. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Zinc Molybdenum Oxide

TWA: 5 mg/m3 (respirable); 10 mg/m3 (dust) **OSHA**

> PEL: 5 mg/m³ (respirable) TWA: 10 mg/m³ dust 0.5 mg/m3 Respirable fraction

ACGIH

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NIOSH TWA: 10 mg/m3 8-hour

PNEC (Predicted No Effect

Concentration)

No information available

DNEL (Derived No Effect Level) No information available

Biological Limit Values No information available

8.2. Exposure controls

Engineering Measures Provide a good standard of controlled ventilation (5 to 10 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

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

Skin and Body Protection Wear suitable protective clothing.

Hand Protection For operations where prolonged or repeated skin contact may occur, impervious

gloves should be worn.

Respiratory Protection

Thermal hazards

In case of inadequate ventilation wear respiratory protection.

None known. Wear suitable protective clothing.

Follow general hygiene considerations recognized as common good workplace **Hygiene Measures**

practices. The worker should wash daily at the end of each work shift, and prior to

eating, drinking, smoking, etc.

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:

Solid Powder **Physical State** Color White to off-white

Odor Odorless

Odor Threshold No information available 8.4 (5% water suspension)

Melting Point / Melting Range Not applicable Melting point / Freezing point Not applicable **Boiling Point** Not applicable **Freezing Point** Not applicable Non-combustible **Flash Point Evaporation Rate** Not applicable. Not applicable Flammability (solid, gas)

Upper flammability limit:

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Lower flammability limit:

Vapor Pressure Not applicable **Vapor Density** Not applicable **Vapor Density** Not applicable 2.5 - 2.7 g/cm3, 20°C **Density**

Relative Density 2.6 g/cm3, 20° C **Water Solubility** 11.7 mg/l, 25° C Solubility in other solvents No data available **Partition coefficient** Not applicable **Autoignition Temperature** Not applicable No data available **Decomposition Temperature** Not applicable. **Viscosity** Not applicable Kinematic viscosity

Oxidizing Properties Not applicable

No information available **Particle Size**

Not applicable **VOC Content (%)**

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

Stable under normal conditions 10.1. Reactivity

Stable under normal conditions 10.2. Chemical stability

10.3. Possibility of hazardous

reactions

No specific hazard known

10.4. Conditions to avoid Incompatible materials Dust formation

10.5. Incompatible materials None known

10.6. Hazardous decomposition None known

products

SECTION 11: Toxicological information

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

equivalent values.

11.1. Information on toxicological effects

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Zinc Molybdenum Oxide

Oral LD50 >10000 mg/kg Rat

Not Listed **IARC**

Specific target organ toxicity Kidney (based on tubular degeneration/regeneration of male Han Wistar rats at

125 mg/kg/day). NOAEL - 60 mg/kg Rat; Oral; 90-day. - Repeated exposure

No data available **Acute Toxicity**

Inhalation of dust in high concentration may cause irritation of respiratory system. **Respiratory Sensitization**

Serious eye damage/eye

irritation

Dust may cause mechanical irritation to eyes

Prolonged or repeated contact may dry skin and cause irritation Skin Corrosion/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 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.

Mixture versus substance

information

Mixture

Information on Likely Routes of Exposure

Inhalation of dust may cause irritation of the respiratory system Inhalation

Ingestion Ingestion is not a likely route of exposure

Skin Contact with dust can cause mechanical irritation or drying of the skin

Dust contact with the eyes can lead to mechanical irritation **Eves**

Aspiration hazard Not an expected route of exposure.

11.2. Information on other hazards

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

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11.2.2. Other information Not applicable

SECTION 12: Ecological information

Harmful to aquatic life with long lasting effects 12.1. Toxicity

12.2. Persistence and

degradability

No data available.

12.3. Bioaccumulative potential No data available.

Partition coefficient Not applicable

Bioconcentration factor

(BCF)

No data available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

assessment

No data available.

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 should be in accordance with applicable regional, national and local laws **Disposal Methods**

and regulations.

Product residue may remain in empty containers. Empty containers should be **Contaminated Packaging**

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

SECTION 14: Transport information

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

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

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 Not applicable

user

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

Global Inventories

Pure substance/mixture Mixture

Chemical Name	CAS Number	EC No	EU REACH registrati on number	Australia (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico		Philippine s (PICCS)	Taiwan	TSCA: United States
Zinc Molybdenum Oxide	22914-58- 5 61583-60- 6		01-212080 0481-68-0 000		Y	Y	(1)-781 (ENCS)(ISH L)	KE-11910	Z	N	N	Y	A

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

US Federal Regulations

EPA

Zinc Molybdenum Oxide CERCLA

Listed

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SARA 313 Listed

CWA (Clean Water Act)

Not listed

CAA (Clean Air Act)

Not listed

U.S. State Right-to-Know Regulations

Chemical Name	CAS Number	California Proposition 65	Massachusetts	Minnesota	New Jersey	Pennsylvania
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	N	Y	Y	Y	Υ

Y: Listed ; N: Not Listed

CANADA

WHMIS

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

SECT	16.	Other	infarr	matian
3F(.I	In-	UTNEL	IMIOH	nation

Huber Engineered Materials (HEM) Global Regulatory Affairs Prepared by

regulatory.affairs@huber.com

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OSHA (Occupational Safety and Health Administration of the US Department of Reason for Version

Labor).

Training Advice Do not handle until all safety precautions have been read and understood

IARC (International Agency for Research on Cancer) Abbreviations and acronyms

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)

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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

GHS (Globally Harmonized System)

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