



**Kemgard® 620**

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)

**Issue Date** 25/Jan/2024  
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**Revision Number** 1.3.3  
**Page** 1 of 11

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

**1.1. Product identifier**

**Product Name:** Kemgard® 620  
**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  
3100 Cumberland Boulevard, Suite 600  
Atlanta, GA 30339 USA  
Tel: +1 678 247-7300

**Internet** [www.huberadvancedmaterials.com](http://www.huberadvancedmaterials.com)

**Contact E-Mail** [www.huberadvancedmaterials.com/contact](http://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**

**GHS Classification** Considered a hazardous substance or mixture according to the Globally Harmonized System (GHS)  
**Physical Hazards** Not classified  
**Health Hazards** Specific target organ toxicity (STOT) - repeated exposure, category 2  
**Environmental Hazard** Not classified

**2.2. Label elements**

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 2 of 11

## Symbols/Pictograms



### Signal Word

Warning

### Hazard Statements

May cause damage to organs (kidney) through prolonged or repeated exposure

## Precautionary Statements

### Prevention

Do not handle until all safety precautions have been read and understood  
Employ good industrial hygiene practice  
Do not breathe dust  
Wear protective gloves/protective clothing/eye protection/face protection

### Response

Get medical help 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  
Collect spillage

### Disposal

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

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

## SECTION 3: Composition/information on ingredients

Pure substance/mixture

Mixture

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

## SECTION 4: First aid measures

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 3 of 11

## 4.1. Description of first aid measures

<b>General Advice</b>	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.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Inhalation</b>	Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Aspiration hazard</b>	Not an expected route of exposure.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	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 Media

Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable Extinguishing Media

Do not use water jetstream.

### 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

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 4 of 11

procedure for chemical fires.

## 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. 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.

**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

#### Zinc Molybdenum Oxide

OSHA

TWA: 5 mg/m<sup>3</sup> (respirable); 10 mg/m<sup>3</sup> (dust)  
PEL: 5 mg/m<sup>3</sup> (respirable)

# Safety Data Sheet

## Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 5 of 11

ACGIH

TWA: 10 mg/m<sup>3</sup> dust  
0.5 mg/m<sup>3</sup> Respirable fraction

NIOSH

TWA: 10 mg/m<sup>3</sup> 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

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

**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** In case of inadequate ventilation wear respiratory protection.

**Thermal hazards** None known. Wear suitable protective clothing.

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

**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

**Melting point / Freezing point** Not applicable

**Boiling Point** Not applicable

**Freezing Point** Not applicable

**Flash Point** Non-combustible

**Evaporation Rate** Not applicable.

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 6 of 11

<b>Flammability (solid, gas)</b>	Not applicable
Upper flammability limit:	--
Lower flammability limit:	--
<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Density</b>	2.5 – 2.7 g/cm <sup>3</sup> , 20°C
<b>Relative Density</b>	2.6 g/cm <sup>3</sup> , 20° C
<b>Water Solubility</b>	11.7 mg/l , 25° C
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient</b>	Not applicable
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	Not applicable.
<b>Kinematic viscosity</b>	Not applicable
<b>Oxidizing Properties</b>	Not applicable
<b>Particle Size</b>	No information available
<b>VOC Content (%)</b>	Not applicable

## 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

<b>10.1. Reactivity</b>	Stable under normal conditions
<b>10.2. Chemical stability</b>	Stable under normal conditions
<b>10.3. Possibility of hazardous reactions</b>	No specific hazard known
<b>10.4. Conditions to avoid</b>	Incompatible materials Dust formation
<b>10.5. Incompatible materials</b>	None known
<b>10.6. Hazardous decomposition products</b>	None known

## SECTION 11: Toxicological information

### General Information

Users are advised to consider national Occupational Exposure Limits or other

# Safety Data Sheet

**Kemgard® 620**

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 7 of 11

equivalent values.

## 11.1. Information on toxicological effects

### Zinc Molybdenum Oxide

Oral LD50

>10000 mg/kg Rat

IARC

Not Listed

Specific target organ toxicity

Kidney (based on tubular degeneration/regeneration of male Han Wistar rats at

- Repeated exposure

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

**Acute Toxicity**

No data available

**Respiratory Sensitization**

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

**Serious eye damage/eye irritation**

Dust may cause mechanical irritation to eyes

**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**

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**

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

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 8 of 11

**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

**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 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

# Safety Data Sheet

Kemgard® 620

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 9 of 11

## 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

14.1. 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. 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 registration number	Australia (AIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	01-212080 0481-68-0 000	N	Y	Y	(1)-781 (ENCS)(ISHL)	KE-11910	N	N	N	Y	A

### US Federal Regulations

# Safety Data Sheet

**Kemgard® 620**

Issue Date 25/Jan/2024

Print Date 25/Jan/2024

Revision Number 1.3.3

Page 10 of 11

## EPA

### Zinc Molybdenum Oxide

CERCLA

Listed

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	Y

## 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

## SECTION 16: Other information

<b>Prepared by</b>	Huber Engineered Materials (HEM) Global Regulatory Affairs regulatory.affairs@huber.com
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<b>Reason for Version</b>	OSHA (Occupational Safety and Health Administration of the US Department of Labor).
<b>Training Advice</b>	Do not handle until all safety precautions have been read and understood
<b>Abbreviations and acronyms</b>	IARC (International Agency for Research on Cancer) IATA (International Air Transport Association) IMDG (International Maritime Dangerous Goods) IUCIID (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)

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# Safety Data Sheet

**Kemgard® 620**

**Issue Date** 25/Jan/2024

**Print Date** 25/Jan/2024

**Revision Number** 1.3.3

**Page 11 of 11**

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  
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**