



**Kemgard® 911B**

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

Issue Date 01/Jan/2024  
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**Section 1: PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b>	Kemgard® 911B
<b>Pure substance/mixture</b>	Mixture
<b><u>Zinc Oxide</u></b>	
CAS Number	1314-13-2
Weight-%	>25
<b><u>Zinc Molybdenum Oxide</u></b>	
CAS Number	22914-58-5 61583-60-6
Weight-%	>25
<b>Recommended Use</b>	Flame retardant Smoke suppressant
<b>Uses advised against</b>	None known
<b>Company:</b>	J.M. Huber Corporation 3100 Cumberland Boulevard, Suite 600 Atlanta, GA 30339 USA Tel: +1 678 247-7300
<b>Emergency Telephone</b>	CHEMTREC China: 4001-204937 (Mandarin) Local call: +86 532 5879 2008
<b>E-mail</b>	hubermaterials@huber.com
<b>Internet</b>	www.huberadvancedmaterials.com
<b>Registration Number</b>	No information available

**Section 2: HAZARDS IDENTIFICATION**

**GHS Classification**

<b>Physical Hazard</b>	None
<b>Health Hazard</b>	Acute toxicity - Inhalation Category 4 Specific target organ toxicity (STOT) - repeated exposure, category 2
<b>Environmental Hazard</b>	Acute Aquatic Toxicity: Category 1 Chronic Aquatic Toxicity: Category 1

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## Label Elements

### Symbols/Pictograms



### Signal Word

Warning

### Hazard Statement

H332 - Harmful if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects

## Precautionary Statements

### Prevention

P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe dust  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 - Use only outdoors or in a well-ventilated area  
P273 - Avoid release to the environment

### Response

P317 - Get emergency medical help.  
P319 - Get medical help if you feel unwell.  
P391 - Collect spillage  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### Spills and Leaks

P402 - Store in a dry place

### Storage

Store in a dry place  
Store away from incompatible materials.

### Disposal

P501 - Dispose of contents/containers in accordance with local regulations

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## 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-%
Zinc Oxide	1314-13-2	Y	Acute Aquatic Toxicity Category 1 Chronic Aquatic Toxicity Category 1	A	01-2119463881-32	>25
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

<b>General Advice</b>	In case of doubt or when symptoms persist, seek medical attention.
<b>Eye Contact</b>	Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	If swallowed, rinse mouth with water (only if the person is conscious)
<b>Notes to Physician</b>	Treat symptomatically
<b>Personal Protective Equipment For First Aid Responders</b>	Wear suitable protective clothing IF exposed or concerned: Get medical advice/attention
<b>Expected acute symptoms and delayed symptoms</b>	None known

## Section 5: FIRE FIGHTING MEASURES

<b>Flammable Properties</b>	None known
<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO2) Dry chemical Foam

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**Unsuitable extinguishing media:** Water spray may be ineffective.

**Specific Hazards Arising from the Chemical** Avoid dust formation. In the event of fire and/or explosion do not breathe fumes. The pressure in sealed containers can increase under the influence of heat. Use water spray to cool unopened containers.

**Protective Equipment and Precautions for Firefighters** Wear self-contained breathing apparatus and protective suit

## Section 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Use personal protective equipment. Avoid dust formation. Avoid contact with skin, eyes and clothing. Avoid inhalation of dust.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Should not be released into the environment. Local authorities should be advised if significant spillages cannot be contained.

**Methods for cleaning up** Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

**Other Information:** Material can create slippery conditions.

## Section 7: HANDLING AND STORAGE

**Handling** Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe vapors/dust. Avoid contact with skin, eyes and clothing.

**Storage** Keep container tightly closed in a dry and well-ventilated place

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits** Provide adequate ventilation as well as local exhaust at critical locations

### Zinc Oxide

China

STEL: 5 MG/M3

ACGIH

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

STEL: 10 mg/m<sup>3</sup> (respirable)

NIOSH

TWA: 2 mg/m<sup>3</sup> (respirable)

Ceiling: 15 mg/m<sup>3</sup> (total dust)

STEL: 10 mg/m<sup>3</sup>(fume)

OSHA

TWA: 5 mg/m<sup>3</sup> (total dust)

PEL: 15 mg/m<sup>3</sup> (total dust)

5 mg/m<sup>3</sup> (respirable fraction)

### Zinc Molybdenum Oxide

China

TWA: 8-hour: 4 mg/m<sup>3</sup>

China

STEL: Not established

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**ACGIH**

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

**NIOSH**

0.5 mg/m<sup>3</sup> Respirable fraction

**OSHA**

8-hr TWA: 10 mg/m<sup>3</sup>

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

PEL: 5 mg/m<sup>3</sup> (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 goggles with side protection

**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**

Handle in accordance with good industrial hygiene and safety practice

**Environmental Exposure Controls**

Dispose of in accordance with local regulations  
 Do not empty into drains or water courses

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Appearance:**

**Physical State**

Solid  
 Powder

**Color**

White

**Odor**

Odorless

**Odor Threshold**

No information available

**pH:**

6.5 5% Water suspension

**Melting Point / Melting Range**

No information available

**Initial boiling point**

No information available

**Freezing Point**

No information available

**Boiling Point**

No information available

**Flash Point**

Not applicable. Product/Substance is inorganic.

**Evaporation Rate**

Not applicable

**Flammability (solid, gas)**

Non-combustible

**Upper flammability limit:**

Not applicable

**Lower flammability limit:**

Not applicable

**Vapor Pressure**

No data available

**Vapor Density**

No data available

**Relative Density**

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<b>Water Solubility</b>	Slightly soluble
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	No information available.
<b>VOC Content (%)</b>	Not applicable

## Section 10: STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions
<b>Conditions to avoid:</b>	Heat, flames and sparks. Dust formation.
<b>Incompatible materials</b>	None known
<b>Hazardous decomposition products</b>	Metal oxides. Carbon oxides. May emit toxic fumes under fire conditions.
<b>Hazardous Reactions</b>	None under normal processing
<b>Hazardous polymerization:</b>	Hazardous polymerization does not occur

## 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

<b>Eyes</b>	Dust contact with the eyes can lead to mechanical irritation
<b>Skin</b>	No known hazard in contact with skin
<b>Inhalation</b>	May cause respiratory tract irritation
<b>Ingestion</b>	Ingestion is not a likely route of exposure
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may cause mechanical irritation to eyes.

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## 11.1. Information on toxicological effects

### Zinc Oxide

Oral LD50 7950 mg/kg Rat

### 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.

<b>Acute Toxicity</b>	Low hazard for usual industrial or commercial handling
<b>Serious eye damage/eye irritation</b>	Dust may cause mechanical irritation to eyes
<b>Respiratory Sensitization</b>	Does not cause sensitization
<b>Skin Corrosion/Irritation</b>	Contact with dust can cause mechanical irritation or drying of the skin
<b>Skin Sensitization</b>	Not a skin sensitizer
<b>Germ cell mutagenicity</b>	No data available.
<b>Reproductive Effects</b>	This product does not contain any known or suspected reproductive hazards.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Target Organ Effects</b>	Skin. Eyes. Respiratory system.
<b>Specific target organ toxicity - Single exposure</b>	No data available.
<b>Specific target organ toxicity - Repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure if inhaled. Kidney.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

**Persistence/Degradability:** No data available.

**Bioaccumulative Potential** No data available.

**Partition coefficient** No data available

**Bioconcentration factor (BCF)** No data available.

**Mobility in soil** No data available.

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**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:** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## Section 14: TRANSPORT INFORMATION

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

<b>DOT</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate) Not regulated in non-bulk packages (<119 gal)
<b>ADR</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)
<b>ADN</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)
<b>IATA</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)
<b>IMDG/IMO</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)
<b>ICAO</b>	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**14.1. UN number** UN3077

**14.2. UN proper shipping name** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**14.3. Transport hazard class(es)** 9

**Subsidiary Risk** -

**14.4. Packing group** III

**14.5. Environmental hazards** Marine Pollutant

**14.6. Special precautions for** Do not handle until all safety precautions have been read and understood.



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user

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable



Marine Pollutant



## 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 (AIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Zinc Oxide	1314-13-2	215-222-5	01-211946388 1-32	Y	Y	Y	ENCS: (1)-561 ISHL: (1)-561	KE-35565	Y	Y	Y	Y	A
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	245-322-4	01-212080048 1-68-0000	N	Y	Y	(1)-781 (ENCS)(ISHL)	KE-11910	N	N	N	Y	A

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

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## 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

**Physical Hazard** None

**Health Hazard** Acute toxicity - Inhalation Category 4  
Specific target organ toxicity (STOT) - repeated exposure, category 2

**Environmental Hazard** Acute Aquatic Toxicity: Category 1  
Chronic Aquatic Toxicity: Category 1

### Label Elements

#### Symbols/Pictograms



**Signal Word** Warning

**Hazard Statement** H332 - Harmful if inhaled  
H373 - May cause damage to organs through prolonged or repeated exposure  
H400 - Very toxic to aquatic life  
H410 - Very toxic 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

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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**