



**ADVANCED  
MATERIALS**

# Safety Data Sheet

**Kemgard® 911B**

**GHS (Globally Harmonized System)**

**Issue Date** 01/Jan/2024

**Print Date** 13/Dec/2023

**Revision Number** 1.5

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

### **1.1. Product identifier**

**Product Name:** Kemgard® 911B

**Pure substance/mixture** Mixture

#### **Zinc Oxide**

**CAS Number** 1314-13-2

**EU REACH registration number** 01-2119463881-32

#### **Zinc Molybdenum Oxide**

**CAS Number** 22914-58-5

61583-60-6

**EU REACH registration number** 01-2120800481-68-0000

### **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)

**E-mail** [hubermaterials@huber.com](mailto:hubermaterials@huber.com)

**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**

# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page** 2 of 12**GHS Classification****Hazards identification****Physical Hazard**

Not classified

**Health Hazards**

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

**2.2. 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

# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page** 3 of 12

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Storage**

P402 - Store in a dry place.

**Disposal**

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

## SECTION 3: Composition/information on ingredients

**Pure substance/mixture**

Mixture

| Chemical Name         | CAS Number               | TSCA: United States | EU REACH registration number |
|-----------------------|--------------------------|---------------------|------------------------------|
| Zinc Oxide            | 1314-13-2                | A                   | 01-2119463881-32             |
| Zinc Molybdenum Oxide | 22914-58-5<br>61583-60-6 | A                   | 01-2120800481-68-0000        |

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

## 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**

Based on available data, the classification criteria are not met.

**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.

# Safety Data Sheet

Kemgard® 911B

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.5

Page 4 of 12

## 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 (CO<sub>2</sub>).

#### Unsuitable Extinguishing Media

None known.

### 5.2. Special hazards arising from the substance or mixture

Non-combustible.

### 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

# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page** 5 of 12**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**

Zinc Oxide  
Thailand

TWA: 5 mg/m<sup>3</sup> (fume)**Biological Limit Values**

No information available

**Recommended monitoring procedures**

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

**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  
Do not empty into drains or water courses

## SECTION 9: Physical and chemical properties

# Safety Data Sheet

**Kemgard® 911B**

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.5

Page 6 of 12

**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 5% Water suspension                       |
| 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                    | Not applicable Product/Substance is inorganic |
| Evaporation Rate               | Not applicable.                               |
| Flammability (solid, gas)      | Not applicable                                |
| Flammability (solid, gas)      | Non-combustible                               |
| Upper flammability limit:      | Not applicable                                |
| Lower flammability limit:      | Not applicable                                |
| Vapor Pressure                 | No data available                             |
| Vapor Density                  | Not applicable                                |
| Vapor Density                  | No data available                             |
| Density                        | No data available                             |
| Relative Density               | 5.1                                           |
| 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                      |
| VOC Content (%)                | 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

|                                |                                |
|--------------------------------|--------------------------------|
| 10.1. Reactivity               | Stable under normal conditions |
| 10.2. Chemical stability       | Stable under normal conditions |
| 10.3. Possibility of hazardous | None under normal processing   |

# Safety Data Sheet

**Kemgard® 911B**

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.5

Page 7 of 12

**reactions****10.4. Conditions to avoid** Dust formation Incompatible materials**10.5. Incompatible materials** Strong oxidizing agents**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****Zinc Oxide****LD50s and LC50s** 5000 mg/kg Oral LD50 Rat**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.**Acute Toxicity** Low hazard for usual industrial or commercial handling**Respiratory Sensitization** Does not cause sensitization**Serious eye damage/eye irritation** Dust may cause mechanical irritation to eyes**Skin Corrosion/Irritation** Contact with dust can cause mechanical irritation or drying of the skin**Skin Sensitization** Not a skin sensitizer**Germ cell 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.

# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page** 8 of 12

**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**

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

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

**Zinc Oxide**

**WGK Classification (AwSV)** 2187 WGK: 2

**12.2. Persistence and degradability** No data available.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient** No data available

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

**12.4. Mobility in soil** No data available.

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



# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page** 9 of 12**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**

Dispose of waste product or used containers according to local regulations. Do not allow to enter into surface water or drains.

**Contaminated Packaging**

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

**Zinc Oxide****WGK Classification (AwSV)** 2187 WGK: 2

## SECTION 14: Transport information

**Mode of Transportation (Road, Water, Air, Rail)****TDG -Canada**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**DOT**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate),

, Not regulated in non-bulk packages (&lt;119 gal)

**ADR**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**ADN**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**IATA**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**IMDG/IMO**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)

**ICAO**

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)

# Safety Data Sheet

Kemgard® 911B

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.5

Page 10 of 12

## 14.3. Transport hazard class(es) 9

Subsidiary Risk -

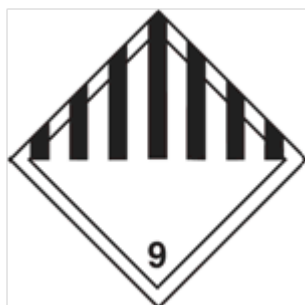
14.4. Packing group III

14.5. Environmental hazards Marine Pollutant

EmS: F-A, S-F

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

## 14.7. Maritime transport in bulk according to IMO instruments



Marine Pollutant



## 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 (AIC) | Canada (DSL) | China (IECSC) | Japan | S. Korea (KECL) | Mexico | Thailand (TECI) | New Zealand | Philippines (PICCS) | Taiwan | TSCA: United States |
|---------------|------------|-----------|-----------------|--------------|---------------|-------|-----------------|--------|-----------------|-------------|---------------------|--------|---------------------|
| Zinc Oxide    | 1314-13-2  | 215-222-5 | Y               | Y            | Y             | ENCS: | KE-35565        | Y      | 55-1-0137       | Y           | Y                   | Y      | A                   |

HUBER

# Safety Data Sheet

Kemgard® 911B

Issue Date 01/Jan/2024

Print Date 13/Dec/2023

Revision Number 1.5

Page 11 of 12

|                          |                                  |           |   |   |   |                             |          |   |   |   |   |   |   |
|--------------------------|----------------------------------|-----------|---|---|---|-----------------------------|----------|---|---|---|---|---|---|
|                          |                                  |           |   |   |   | (1)-561<br>ISHL:<br>(1)-561 |          |   | 7 |   |   |   |   |
| Zinc Molybdenum<br>Oxide | 22914-58-<br>5<br>61583-60-<br>6 | 245-322-4 | N | Y | Y | (1)-781<br>(ENCS)(IS<br>HL) | KE-11910 | N | Y | N | N | Y | A |

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

## REACH No.

### Zinc Oxide

EU REACH registration number 01-2119463881-32

Turkish KKDIK pre-registration 05-0000192715-32-0000

### Zinc Molybdenum Oxide

EU REACH registration number 01-2120800481-68-0000

Turkish KKDIK pre-registration 05-0000192714-03-0000

### Germany

Very toxic to aquatic life with long lasting effects

### Zinc Oxide

WGK Classification (AwSV) 2187 WGK: 2

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were carried out

## SECTION 16: Other information

### Prepared by

Huber Engineered Materials Global Regulatory Affairs  
email: regulatory.affairs@huber.com.

### GHS Classification

#### Symbols/Pictograms



Signal Word

Warning

# Safety Data Sheet

**Kemgard® 911B****Issue Date** 01/Jan/2024**Print Date** 13/Dec/2023**Revision Number** 1.5**Page 12 of 12****Hazard Statements**

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

**Hazards identification****Physical Hazard**

Not classified

**Health Hazards**

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

**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)  
EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification  
DOT (Department of Transportation)  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
TWA (Time-Weighted Average)  
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)  
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)  
Land transport (ADR/RID)  
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  
PNEC (Predicted No Effect Concentration)  
GHS (Globally Harmonized System)

**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**