



Kemgard® 911B

GHS (Globally Harmonized System)

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Print Date 13/Dec/2023

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

1.1. Product identifier

Product Name:	Kemgard® 911B
Pure substance/mixture	Mixture
<u>Zinc Oxide</u>	
CAS Number	1314-13-2
Weight-%	>25
<u>Zinc Molybdenum Oxide</u>	
CAS Number	22914-58-5 61583-60-6
Weight-%	>25

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
E-mail	hubermaterials@huber.com

1.4. Emergency telephone number	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS Classification

Hazards identification

Physical Hazard	Not classified
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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 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

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

Storage P402 - Store in a dry place.

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

2.3. Other hazards No information available.

SECTION 3: Composition/information on ingredients

Pure substance/mixture Mixture

Chemical Name	CAS Number	TSCA: United States	EC No	EU REACH registration number	GHS Classification	Weight-%
Zinc Oxide	1314-13-2	A	215-222-5	01-2119463881-32.	Aquatic Acute Category 1; H400 Aquatic Chronic Category 1; H410	>25
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	A	245-322-4	01-2120800481-68-000.	Acute Tox. 4, H332 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	>25

SECTION 4: First aid measures

4.1. Description of first aid measures

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.

Ingestion Rinse mouth thoroughly with water.

Inhalation If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

4.2. Most important symptoms and effects, both acute and delayed Inhalation of dust may cause irritation of the respiratory system. Eye irritation.

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.

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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 (CO₂).

Unsuitable Extinguishing Media

Do not use water jetstream.

Flammable Properties

None known.

5.2. Special hazards arising from the substance or mixture

Avoid dust formation. Do not breathe dust.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Fire-fighting measures

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away. 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. Dispose of in accordance with federal, state and local regulations.

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

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7.1. Precautions for safe handling

Minimize dust generation and accumulation. Ensure adequate ventilation. Use personal protective equipment as required. 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. See section 10.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Zinc Oxide

India

STEL: 10 mg/m³ (fume)

TWA: 5 mg/m³ (fume); 10 mg/m³ (total dust)

ACGIH

STEL: 10 mg/m³ (respirable)

TWA: 2 mg/m³ (respirable)

OSHA

PEL: 15 mg/m³ (total dust)

5 mg/m³ (respirable fraction)

Zinc Molybdenum Oxide

India

TWA: Not established

ACGIH

TWA: 10 mg/m³ dust

0.5 mg/m³ Respirable fraction

OSHA

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

PEL: 5 mg/m³ (respirable)

Biological Limit Values

No information available

Recommended monitoring procedures

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

DNEL (Derived No Effect Level)

No information available

PNEC (Predicted No Effect Concentration)

No information available

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

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Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing.
Hand Protection	Wear suitable gloves.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection.
Thermal hazards	Wear suitable protective clothing.
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

9.1. Information on basic physical and chemical properties

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
Boiling Point	No information available
Freezing Point	No information available
Flash Point	Not applicable Product/Substance is inorganic
Evaporation Rate	Not applicable
Upper	Not applicable
Lower	Not applicable
Vapor Pressure	No data available
Vapor Density	No data available
Solubility in other solvents	No information available
Water Solubility	Slightly soluble
Partition coefficient	No data available
Autoignition Temperature	No data available

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Viscosity No information available

Oxidizing Properties Not applicable

VOC Content (%) Not applicable

Decomposition Temperature No information available

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 reactions None under normal processing

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.

Information on Likely Routes of Exposure

Inhalation May cause respiratory tract irritation

Skin No known hazard in contact with skin

Eyes Dust contact with the eyes can lead to mechanical irritation

Ingestion Ingestion is not a likely route of exposure

Symptoms related to the physical, chemical and toxicological characteristics Dust may cause mechanical irritation to eyes.

11.1. Information on toxicological effects

Zinc Oxide

Oral LD50 7950 mg/kg Rat

Zinc Molybdenum Oxide

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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.
Specific target organ toxicity - Repeated exposure	May cause damage to organs through prolonged or repeated exposure if inhaled. Kidney.

SECTION 12: Ecological information

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

Zinc Oxide - 1314-13-2

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) Not available.

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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.

12.6. Other adverse effects None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

SECTION 14: Transport information

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

DOT UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, Zinc Molybdate)
Not regulated in non-bulk packages (<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)

14.3. Transport hazard class(es) 9

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Subsidiary Risk -

14.4. Packing group III

14.5. Environmental hazards Marine Pollutant

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

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	22914-58-5	245-322-4	01-212080048 1-68-0000	N	Y	Y	(1)-781 (ENCS)(IS	KE-11910	N	N	N	Y	A

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Oxide	61583-60-6															HL)					
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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 GHS (Globally Harmonized System).

GHS Classification

Labeling

Symbols/Pictograms



Signal Word Warning

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

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

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

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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)

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

PNEC (Predicted No Effect Concentration)

GHS (Globally Harmonized System)

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