ADVANCED MATERIALS

Safety Data Sheet

Kemgard® 911B

GHS (Globally Harmonized System)

Issue Date 01/Jan/2024

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

1.1. Product identifier

Print Date 13/Dec/2023

Product Name: Kemgard® 911B

Pure substance/mixture Mixture

Zinc Oxide

CAS Number 1314-13-2 **Weight-%** >25

Zinc Molybdenum Oxide

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

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

No information available. 2.3. Other hazards

SECTION 3: Composition/information on ingredients

Pure substance/mixture Mixture

Chemical Name	CAS Number	TSCA: United States		EU REACH registratio n number	GHS Classificatio n	Weight-%
Zinc Oxide	1314-13-2	A	215-222-5	01-211946 3881-32.	Aquatic Acute Category 1; H400 Aquatic Chronic Category 1; H410	>25
Zinc Molybdenum Oxide	22914-58-5 61583-60-6	A	245-322-4	01-212080 0481-68-0 000.	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

Inhalation of dust may cause irritation of the respiratory system. Eye irritation.

and effects, both acute and

delayed

medical attention and special treatment needed

4.3. Indication of any immediate 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 Avoid dust formation. Do not breathe dust.

the substance or mixture

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.

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, Keep container tightly closed and dry. Store away from incompatible materials.

including any incompatibilities 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) PEL: 15 mg/m³ (total dust) **OSHA** 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)

No information available **Biological Limit Values**

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

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

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

Wear suitable protective clothing. **Skin and Body Protection**

Hand Protection Wear suitable gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Thermal hazards Wear suitable protective clothing.

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

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

No information available **Boiling Point**

Freezing Point No information available

Flash Point Not applicable

Product/Substance is inorganic

Evaporation Rate Not applicable

Not applicable **Upper** Lower Not applicable **Vapor Pressure** No data available

No data available **Vapor Density**

Solubility in other solvents

Water Solubility

No information available

Slightly soluble

Partition coefficient No data available

No data available **Autoignition Temperature**

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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

Stable under normal conditions 10.2. Chemical stability

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 None known

products

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

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

Ingestion Ingestion is not a likely route of exposure

Symptoms related to the

Dust may cause mechanical irritation to eyes.

physical, chemical and toxicological characteristics

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 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

Low hazard for usual industrial or commercial handling **Acute Toxicity**

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.

This product does not contain any known or suspected reproductive hazards. **Reproductive Effects**

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

14.5. Environmental hazards Marine Pollutant

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

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 (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Zealand	Philippin es (PICCS)	Taiwan	TSCA: United States
Line Oxide			01-211946388 1-32		Υ	Y	ENCS: (1)-561 ISHL: (1)-561	KE-35565	Y	Y	Y	Υ	A
Zinc Molybdenum	22914-58- 5	245-322-4	01-212080048 1-68-0000	N	Y	Ý	(1)-781 (ENCS)(IS	KE-11910	N	N	N	Y	А

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Oxide	61583-60-			HL)			
	6					1	

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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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)

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