

Revision date 30-Oct-2023

Revision Number 3

**1. Identification****Product identifier****Product Name** BOL 72733**Other means of identification****Product Code(s)** 3201028**UN number or ID number** UN3077**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** Lubricant and sealant used for threaded connections**Restrictions on use** Do not use on oxygen lines or in oxygen enriched atmospheres.**Details of the supplier of the safety data sheet****Manufacturer Address**Bestolife Corporation  
2126 Vanco Drive  
Irving TX 75061  
855-243-9164/972-865-8961  
Telefax 214-631-3047**Emergency telephone number****Emergency Telephone** CHEMTREC U.S.: 800-424-9300, International +1 703-527-3887 (24-hours/7 days)**2. Hazard(s) identification****Classification**

Acute toxicity - Oral	Category 4
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Effects on or via lactation	Yes

**Appearance** Viscous semi-solid**Physical state** Solid**Odor** Petroleum**Label elements****Danger****Hazard statements**Harmful if swallowed  
May cause cancer  
May damage fertility or the unborn child  
May cause harm to breast-fed children  
Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves, protective clothing, eye protection and face protection  
 Do not breathe dusts or mists  
 Avoid contact during pregnancy and while nursing  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant

**Other information**

May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**Unknown acute toxicity**

56.17117 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 30 - < 50	-	-
Lead	7439-92-1	>= 30 - < 50	-	-
Graphite	7782-42-5	>= 10 - < 20	-	-
Zinc	7440-66-6	>= 10 - < 20	-	-
Copper metal powder	7440-50-8	>= 1 - < 5	-	-
Talc	14807-96-6	>= 1 - < 5	-	-
Quartz	14808-60-7	>= 1 - < 5	-	-
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 1 - < 5	-	-
Barium bis(dinonylnaphthalenesulphonate)	25619-56-1	>= 1 - < 5	-	-
Zinc oxide	1314-13-2	>= 0 - < 1.0	-	-
Calcium bis(dinonylnaphthalenesulphonate)	1474044-79-5	>= 0 - < 1.0	-	-
Calcium petroleum sulfonates	61789-86-4	>= 0 - < 1.0	-	-
Calcium oxide	1305-78-8	>= 0 - < 1.0	-	-

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. First-aid measures

##### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	No information available.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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#### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous combustion products</b>	Carbon oxides. Lead compounds. Metal oxides. Oxides of sulfur.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

#### 6. Accidental release measures

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

## 7. Handling and storage

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with the particular national regulations.
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## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m <sup>3</sup> inhalable particulate matter excluding metal working fluids, highly & severely refined	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Lead 7439-92-1	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 µg/m <sup>3</sup>	IDLH: 100 mg/m <sup>3</sup> TWA: 0.050 mg/m <sup>3</sup>
Graphite 7782-42-5	TWA: 2 mg/m <sup>3</sup> respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m <sup>3</sup> total dust synthetic TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf respirable dust natural (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup> natural respirable dust
Copper metal powder 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> fume	TWA: 0.1 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> dust and mist (vacated) TWA: 0.1 mg/m <sup>3</sup> Cu dust, fume, mist	IDLH: 100 mg/m <sup>3</sup> dust, fume and mist TWA: 1 mg/m <sup>3</sup> dust and mist TWA: 0.1 mg/m <sup>3</sup> fume
Talc 14807-96-6	TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 20 mppcf if 1% Quartz or more, use Quartz limit (vacated) TWA: 2 mg/m <sup>3</sup> respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> containing no Asbestos and <1% Quartz respirable dust
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> (vacated) TWA: 0.1 mg/m <sup>3</sup>	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable

		respirable dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	dust	
Barium bis(dinonylnaphthalenesulphonate) 25619-56-1	TWA: 0.5 mg/m <sup>3</sup> Ba	TWA: 0.5 mg/m <sup>3</sup> Ba regulated under CAS 7440-39-3 (vacated) TWA: 0.5 mg/m <sup>3</sup> Ba	IDLH: 50 mg/m <sup>3</sup> Ba TWA: 0.5 mg/m <sup>3</sup> except Barium sulfate Ba	
Zinc oxide 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable particulate matter TWA: 2 mg/m <sup>3</sup> respirable particulate matter	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> fume (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) STEL: 10 mg/m <sup>3</sup> fume	IDLH: 500 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup> dust TWA: 5 mg/m <sup>3</sup> dust and fume STEL: 10 mg/m <sup>3</sup> fume	
Calcium oxide 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup> not in effect as a result of reconsideration	IDLH: 25 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	
Chemical name	Alberta	British Columbia	Ontario	Quebec
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA:	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Lead 7439-92-1	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> Adverse reproductive effect	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
Graphite 7782-42-5	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Copper metal powder 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>
Talc 14807-96-6	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Barium bis(dinonylnaphthalenesulphonate) 25619-56-1	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>
Zinc oxide 1314-13-2	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Calcium oxide 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

#### Other information

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

#### Biological occupational exposure limits

Chemical name	ACGIH
Lead 7439-92-1	200 µg/L - blood (Lead) - not critical

#### Appropriate engineering controls

**Engineering controls**  
Showers  
Eyewash stations  
Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** No special protective equipment required.

**Hand protection** PPE16 - Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training. Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use appropriate respiratory protection.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse.

## **9. Physical and chemical properties**

### **Information on basic physical and chemical properties**

**Physical state** Solid  
**Appearance** Viscous semi-solid  
**Color** black copper  
**Odor** Petroleum  
**Odor threshold**

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Initial boiling point and boiling range</b>	No data available	None known
<b>Flash point</b>	>= 162.8 °C / 325.0 °F	Method ASTM D 92, Cleveland open cup Distillates (petroleum), hydrotreated heavy naphthenic
<b>Evaporation rate</b>		None known
<b>Flammability</b>		None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>		None known
<b>Relative vapor density</b>	No data available	None known
<b>Relative density</b>	1.9	None known
<b>Water solubility</b>	Negligible	None known
<b>Solubility(ies)</b>		None known
<b>Partition coefficient</b>		None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>		None known
<b>Dynamic viscosity</b>		None known
<b><u>Other information</u></b>		
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>VOC content</b>	No information available	

## 10. Stability and reactivity

<b>Reactivity</b>	Not classified as a reactivity hazard.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Can react with strong oxidizing agents.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	May be harmful in contact with skin.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	No information available.
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### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	1,646.80 mg/kg
<b>ATEmix (dermal)</b>	3,893.80 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	148.20 mg/l

#### Unknown acute toxicity

56.17117 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-
Graphite 7782-42-5	-	-	> 2000 mg/m <sup>3</sup> ( Rat ) 4 h
Zinc 7440-66-6	= 630 mg/kg ( Rat )	-	-
Copper metal powder 7440-50-8	-	-	> 5.11 mg/L ( Rat ) 4 h
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 2180 mg/m <sup>3</sup> ( Rat ) 4 h
Barium bis(dinonylnaphthalenesulphona	= 1750 mg/kg ( Rat )	> 1000 mg/kg ( Rabbit )	> 21 mg/L ( Rat ) 1 h

te) 25619-56-1			
Zinc oxide 1314-13-2	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	> 5700 mg/m <sup>3</sup> ( Rat ) 4 h
Calcium petroleum sulfonates 61789-86-4	> 20 g/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 1.9 mg/L ( Rat ) 4 h
Calcium oxide 1305-78-8	= 500 mg/kg ( Rat )	-	> 6.04 mg/L ( Rat ) 4 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	A2	Group 1	Known	X
Lead 7439-92-1	A3	Group 2A	Reasonably Anticipated	X
Talc 14807-96-6	-	Group 3	-	X
Quartz 14808-60-7	A2	Group 1	Known	X
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	A2	Group 1	Known	X

**Legend**

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed children.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target organ effects** Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Gastrointestinal tract (GI), Central Vascular System (CVS), Lungs, Gingival Tissue.

**Aspiration hazard** No information available.

## 12. Ecological information

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	-	LC50: >5000mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	EC50: >1000mg/L (48h, <i>Daphnia magna</i> )
Lead 7439-92-1	-	LC50: =0.44mg/L (96h, <i>Cyprinus carpio</i> ) LC50: =1.17mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =1.32mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	EC50: =600µg/L (48h, water flea)
Graphite 7782-42-5	-	LC50: >100mg/L (96h, <i>Danio rerio</i> )	-	-
Zinc 7440-66-6	EC50: 0.11 - 0.271mg/L (96h, <i>Pseudokirchneriella subcapitata</i> ) EC50: 0.09 - 0.125mg/L (72h, <i>Pseudokirchneriella subcapitata</i> )	LC50: 2.16 - 3.05mg/L (96h, <i>Pimephales promelas</i> ) LC50: 0.211 - 0.269mg/L (96h, <i>Pimephales promelas</i> ) LC50: =2.66mg/L (96h, <i>Pimephales promelas</i> ) LC50: =30mg/L (96h, <i>Cyprinus carpio</i> ) LC50: =0.45mg/L (96h, <i>Cyprinus carpio</i> ) LC50: =7.8mg/L (96h, <i>Cyprinus carpio</i> ) LC50: =3.5mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =0.24mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =0.59mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =0.41mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	EC50: 0.139 - 0.908mg/L (48h, <i>Daphnia magna</i> )
Copper metal powder 7440-50-8	EC50: 0.0426 - 0.0535mg/L (72h, <i>Pseudokirchneriella subcapitata</i> ) EC50: 0.031 - 0.054mg/L (96h, <i>Pseudokirchneriella subcapitata</i> )	LC50: 0.0068 - 0.0156mg/L (96h, <i>Pimephales promelas</i> ) LC50: <0.3mg/L (96h, <i>Pimephales promelas</i> ) LC50: =0.2mg/L (96h, <i>Pimephales promelas</i> ) LC50: =0.052mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: =1.25mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =0.3mg/L (96h, <i>Cyprinus carpio</i> )	-	EC50: =0.03mg/L (48h, <i>Daphnia magna</i> )

		LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)		
Talc 14807-96-6	-	LC50: >100g/L (96h, Brachydanio rerio)	-	-
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Zinc oxide 1314-13-2	-	LC50: =1.55mg/L (96h, Danio rerio)	-	-
Calcium petroleum sulfonates 61789-86-4	-	LC50: 5.7 - 9.7mg/L (96h, Pimephales promelas) LC50: 1.0 - 10.0mg/L (96h, Pimephales promelas)	-	EC50: 6.2 - 12mg/L (48h, Daphnia magna)
Calcium oxide 1305-78-8	-	LC50: =1070mg/L (96h, Cyprinus carpio)	-	-

**Persistence and degradability****Bioaccumulation**

There is no data for this product.

Chemical name	Partition coefficient
Calcium bis(dinonylnaphthalenesulphonate) 1474044-79-5	6.6

**Mobility in soil****Other adverse effects**

No information available.

**13. Disposal considerations****Disposal methods****Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Do not reuse empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**California waste information**

This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. Transport information****Remarks**

DG for domestic (ground) transport applies to containers over 119 gallons or 450 litres.

IMDG Clause 2.10.2.7 / IATA Special Provision A197: Marine pollutants or dangerous goods packaged in single or combination packages containing a net quantity per single or inner package of 5 L or less for liquids or 5 kg for solids are not subject to any other transport regulations, provided the packaging meets general provisions.

**DOT****UN number or ID number**

UN3077

**Proper shipping name**

Environmentally hazardous substance, solid, n.o.s.

**Transport hazard class(es)**

9

**Packing group**

III

<b>Reportable quantity - lbs</b>	Lead: RQ (lb)= 10, Zinc: RQ (lb)= 1000.00
<b>Reportable quantity lbs. (calculated)</b>	Lead: RQ (lb)= 33.00, Zinc: RQ (lb)= 8202.00
<b>Reportable Quantity (RQ)</b>	(Lead: RQ (kg)= 4.54, Zinc: RQ (kg)= 454.00)
<b>Reportable quantity kg (calculated)</b>	Lead: RQ (kg)= 15.00, Zinc: RQ (kg)= 3724.00
<b>DOT Marine Pollutant</b>	PP
<b>Marine pollutant</b>	Lead, Copper metal powder
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, Marine pollutant
<b>Special Provisions</b>	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
<b>Emergency Response Guide Number</b>	171

**TDG**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Special Provisions</b>	16, 99
<b>Marine pollutant name</b>	Lead, Copper metal powder.
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

**MEX**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III
<b>Special Provisions</b>	274, 331, 335

**ICAO (air)**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III
<b>Special Provisions</b>	A97, A158, A179, A197, A215

**IATA**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>ERG Code</b>	9L
<b>Special Provisions</b>	A97, A158, A179, A197, A215
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

**IMDG**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>EmS-No</b>	F-A, S-F
<b>Special Provisions</b>	274, 335, 966, 967, 969
<b>Marine pollutant</b>	P
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, Marine pollutant

**RID**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Classification code</b>	M7
<b>Special Provisions</b>	274, 335, 375, 601
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

**ADR**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Classification code</b>	M7
<b>Tunnel restriction code</b>	(-)
<b>Special Provisions</b>	274, 335, 601, 375
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III, (-)

**ADN**

<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Classification code</b>	M7
<b>Special Provisions</b>	274, 335, 375, 601
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Lead, Copper metal powder), 9, III

**Equipment Requirements** A, PP

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

**TSCA** All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Present	Active
Lead	7439-92-1	Present	Active
Graphite	7782-42-5	Present	Active
Zinc	7440-66-6	Present	Active
Copper metal powder	7440-50-8	Present	Active
Talc	14807-96-6	Present	Active
Quartz	14808-60-7	Present	Active
12-Hydroxy lithium stearate	7620-77-1	Present	Active
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Present	Active
Barium	25619-56-1	Present	Active

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
bis(dinonylnaphthalenesulphonate)			
Zinc oxide	1314-13-2	Present	Active
Calcium bis(dinonylnaphthalenesulphonate)	1474044-79-5	-	Unknown *
Ethenylbenzene polymer with 2-methyl-1,3-butadiene, hydrogenated	68648-89-5	Present	Active
Calcium petroleum sulfonates	61789-86-4	Present	Active
Calcium oxide	1305-78-8	Present	Active
Iron	7439-89-6	Present	Active
Stearic acid	57-11-4	Present	Active
Cadmium	7440-43-9	Present	Active
Magnesium oxide	1309-48-4	Present	Active

\*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

<b>DSL/NDSL</b>	All components of this product are on the Canadian DSL.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIC</b>	All components are listed on AICIS, or are exempt.
<b>NZIoC</b>	Contact supplier for inventory compliance status.

#### Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

#### US Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Lead - 7439-92-1	0.1
Zinc - 7440-66-6	1.0
Copper metal powder - 7440-50-8	1.0
Barium bis(dinonylnaphthalenesulphonate) - 25619-56-1	1.0
Zinc oxide - 1314-13-2	1.0

##### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

##### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lead	-	X	X	-

7439-92-1				
Zinc 7440-66-6	-	X	X	-
Copper metal powder 7440-50-8	-	X	X	-
Zinc oxide 1314-13-2	-	X	-	-

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Lead 7439-92-1	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Zinc 7440-66-6	1000 lb	-	RQ 454 kg final RQ RQ 1000 lb final RQ
Copper metal powder 7440-50-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Lead - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive
Quartz - 14808-60-7	Carcinogen
Cadmium - 7440-43-9	Carcinogen Developmental Male Reproductive

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	X	X	X
Lead 7439-92-1	X	X	X
Graphite 7782-42-5	X	X	X
Zinc 7440-66-6	X	X	X
Copper metal powder 7440-50-8	X	X	X
Talc 14807-96-6	X	X	X
Quartz 14808-60-7	X	X	X
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	-	X	-
Barium bis(dinonylnaphthalenesulphona te) 25619-56-1	X	-	X
Zinc oxide 1314-13-2	X	X	X
Calcium oxide	X	X	X

1305-78-8			
Cadmium 7440-43-9	X	X	X
Magnesium oxide 1309-48-4	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other information**

**NFPA** Health hazards 1 Flammability 1 Instability 0 Special hazards -  
**HMIS** Health hazards \* 2 Flammability 1 Physical hazards 0 Personal protection X  
 Chronic Hazard Star Legend \* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
 Ceiling Maximum limit value \* Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

Revision date 30-Oct-2023

**Revision Note****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**