

Revision date 27-Oct-2025

Revision Number 3

1. Identification

Product identifier

Product Name HONEY KOTE®

Other means of identification

Product Code(s) 659000**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

Supplier Address

Bestolife Corporation
2126 Vanco Drive
Irving TX 75061
855-243-9164/972-865-8961
Telefax 214-631-3047
www.bestolife.com

Manufacturer Address

Bestolife Corporation
2126 Vanco Drive
Irving TX 75061
855-243-9164/972-865-8961
Telefax 214-631-3047
www.bestolife.com

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
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Appearance Viscous semi-solid**Physical state** Solid**Odor** Petroleum

Label elements

Warning

Hazard statements

Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye irritation

**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

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

Eyes

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

If eye irritation persists: Get medical advice and attention

Skin

IF ON SKIN: Wash with plenty of water and soap

Call a POISON CENTER or doctor if you feel unwell

Take off contaminated clothing and wash it before reuse

If skin irritation occurs: Get medical advice and 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 in accordance with local, regional, national, and international regulations as applicable

Other information

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

70.06127 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

73.28707 % of the mixture consists of ingredient(s) of unknown acute dermal 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	-	-
Graphite	7782-42-5	>= 10 - < 20	-	-
Residual oils (petroleum), hydrotreated	64742-57-0	>= 10 - < 20	-	-
Talc	14807-96-6	>= 10 - < 20	-	-
Copper metal powder	7440-50-8	>= 5 - < 10	-	-
Calcium carbonate	471-34-1	>= 5 - < 10	-	-
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	>= 1 - < 5	-	-

Dolomite	16389-88-1	>= 1 - < 5	-	-
Calcium oxide	1305-78-8	>= 1 - < 5	-	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	>= 1 - < 5	-	-
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified	64742-56-9	>= 1 - < 5	-	-
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	>= 1 - < 5	-	-
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 1 - < 5	-	-
Calcium hydroxide	1305-62-0	>= 1 - < 5	-	-
Acetic acid	64-19-7	>= 1 - < 5	-	-
Quartz	14808-60-7	>= 1 - < 5	-	-
Calcium bis(dinonylnaphthalenesulphonate)	1474044-79-5	>= 1 - < 5	-	-

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

Additional information

NOTE: As per Note L, the carcinogen classification does NOT apply to this preparation because the producer of "Petroleum distillates, hydrotreated heavy naphthenic" declares that it contains less than 3% DMSO extractable material by IP-346

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

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Erythema (skin redness). May cause redness and tearing of the eyes. Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Carbon oxides. Metal oxides. Phosphorus oxides. Oxides of sulfur.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	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

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	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

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

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. 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
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Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined Exposure by all routes should be carefully controlled to levels as low as possible	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Graphite 7782-42-5	TWA: 2 mg/m ³ respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m ³ total dust synthetic TWA: 5 mg/m ³ respirable fraction synthetic TWA: 15 mppcf respirable dust natural (vacated) TWA: 2.5 mg/m ³ respirable dust natural (vacated) TWA: 10 mg/m ³ total dust synthetic (vacated) TWA: 5 mg/m ³ respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m ³ TWA: 2.5 mg/m ³ natural respirable dust
Talc 14807-96-6	TWA: 2 mg/m ³ respirable particulate matter particulate matter containing no Asbestos and <1% Crystalline silica	TWA: 20 mppcf if 1% Quartz or more, use Quartz limit (vacated) TWA: 2 mg/m ³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m ³ TWA: 2 mg/m ³ containing no Asbestos and <1% Quartz respirable dust
Copper metal powder 7440-50-8	TWA: 0.2 mg/m ³ fume	TWA: 0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist (vacated) TWA: 0.1 mg/m ³ Cu dust, fume, mist	IDLH: 100 mg/m ³ dust, fume and mist TWA: 1 mg/m ³ dust and mist TWA: 0.1 mg/m ³ fume
Calcium carbonate 471-34-1	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined Exposure by all routes should be carefully controlled to levels as low as possible	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Calcium oxide 1305-78-8	TWA: 2 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³ not in effect as a result of reconsideration	IDLH: 25 mg/m ³ TWA: 2 mg/m ³
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined Exposure by all routes should be carefully controlled to levels as low as possible	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified 64742-56-9	Exposure by all routes should be carefully controlled to levels as low as possible	-	-
Distillates (petroleum),	TWA: 5 mg/m ³ inhalable	TWA: 5 mg/m ³	IDLH: 2500 mg/m ³

hydrotreated light paraffinic 64742-55-8	particulate matter excluding metal working fluids, highly & severely refined Exposure by all routes should be carefully controlled to levels as low as possible	(vacated) TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³	
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	Exposure by all routes should be carefully controlled to levels as low as possible	-	-	
Calcium hydroxide 1305-62-0	TWA: 5 mg/m³	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 5 mg/m³ not in effect as a result of reconsideration	TWA: 5 mg/m³	
Acetic acid 64-19-7	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 µg/m³ (vacated) TWA: 0.1 mg/m³ respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust	
Chemical name	Alberta	British Columbia	Ontario	Quebec
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 5 mg/m³ TWA:	TWA: 5 mg/m³ STEL: 10 mg/m³
Graphite 7782-42-5	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Talc 14807-96-6	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Copper metal powder 7440-50-8	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 1 mg/m³ TWA: 0.2 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³
Calcium carbonate 471-34-1	TWA: 10 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³	-	TWA: 10 mg/m³
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 5 mg/m³ TWA:	TWA: 5 mg/m³ STEL: 10 mg/m³
Calcium oxide 1305-78-8	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 2 mg/m³
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 5 mg/m³ TWA:	TWA: 5 mg/m³ STEL: 10 mg/m³
Distillates (petroleum), hydrotreated light paraffinic 64742-55-8	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 5 mg/m³ TWA:	TWA: 5 mg/m³ STEL: 10 mg/m³
Calcium hydroxide 1305-62-0	TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 5 mg/m³
Acetic acid 64-19-7	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m³ STEL: 15 ppm STEL: 37 mg/m³

Quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³
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Other information

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

Other information

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Appropriate engineering controls**Engineering controls**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Hand protection

PPE16 - Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training; Nitrile or neoprene preferred.

REMARKS: Inspect gloves before use. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier information). Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Remove gloves with care avoiding skin contamination. Wash hands before breaks and at the end of workday. Wear suitable gloves.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
n/a	Wear protective nitrile rubber gloves	0.50 - 0.70 mm	> 60 minutes
n/a	Wear protective Neoprene™ gloves	0.50 - 0.70 mm	> 60 minutes

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. 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**

Appearance	Viscous semi-solid
Physical state	Solid
Color	copper

Odor (includes odor threshold) Petroleum

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Boiling point (or initial boiling point or boiling range)	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	>= 200 °C / 392 °F	Method ASTM D 92, Cleveland open cup Distillates (petroleum), hydrotreated heavy naphthenic
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
SADT (°C)	No data available	None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity		None known
Solubility		None known
Water solubility	Negligible	None known
Partition coefficient n-octanol/water (log value)		None known
Vapor pressure (includes evaporation rate)		None known
Evaporation rate		None known
Density and/or relative density	1.3	None known
Bulk density		
Liquid Density		
Relative vapor density	No data available	None known
Particle characteristics		No information available
Particle Size		
Particle Size Distribution		

Other information**10. Stability and reactivity**

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

11. Toxicological informationInformation on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
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Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Erythema (skin redness). May cause redness and tearing of the eyes. Burning sensation.
Acute toxicity	Harmful if swallowed. Harmful by skin contact.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	1,869.70 mg/kg
ATEmix (dermal)	1,869.40 mg/kg
ATEmix (inhalation-dust/mist)	16.80 mg/l

Unknown acute toxicity

70.06127 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
73.28707 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), hydrotreated heavy naphthenic CAS: 64742-52-5 ID: C64742525 ≥ 30 - < 50 %	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Graphite CAS: 7782-42-5 ID: C7782425 ≥ 10 - < 20 %	-	-	> 2000 mg/m ³ (Rat) 4 h
Copper metal powder CAS: 7440-50-8 ID: C7440508 ≥ 5 - < 10 %	-	-	> 5.11 mg/L (Rat) 4 h
Calcium carbonate CAS: 471-34-1 ID: C471341 ≥ 5 - < 10 %	= 6450 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 3 mg/L (Rat) 4 h
Distillates (petroleum), hydrotreated heavy paraffinic CAS: 64742-54-7 ID: C64742547 ≥ 1 - < 5 %	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Calcium oxide CAS: 1305-78-8 ID: C1305788 ≥ 1 - < 5 %	= 500 mg/kg (Rat)	-	> 6.04 mg/L (Rat) 4 h
Distillates (petroleum), solvent-dewaxed heavy paraffinic CAS: 64742-65-0 ID: C64742650 ≥ 1 - < 5 %	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h

Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified CAS: 64742-56-9 ID: C64742569 ≥ 1 - < 5 %	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5399 mg/m ³ (Rat) 4 h
Distillates (petroleum), hydrotreated light paraffinic CAS: 64742-55-8 ID: C64742558 ≥ 1 - < 5 %	-	-	= 3900 mg/m ³ (Rat) 4 h
Distillates (petroleum), hydrotreated light naphthenic CAS: 64742-53-6 ID: C64742536 ≥ 1 - < 5 %	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2180 mg/m ³ (Rat) 4 h
Calcium hydroxide CAS: 1305-62-0 ID: C1305620 ≥ 1 - < 5 %	= 7340 mg/kg (Rat)	> 2500 mg/kg (Rat)	> 6.04 mg/L (Rat) 4 h
Acetic acid CAS: 64-19-7 ID: C64197 ≥ 1 - < 5 %	= 3310 mg/kg (Rat)	= 1060 mg/kg (Rabbit)	= 11.4 mg/L (Rat) 4 h

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

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	

NOTE: As per Note L, the carcinogen classification does NOT apply to this preparation because the producer of "Petroleum distillates, hydrotreated heavy naphthenic" declares that it contains less than 3% DMSO extractable material by IP-346

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

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 CAS: 64742-52-5 ID: C64742525 ≥ 30 - < 50 %	A2	Group 1	Known	X
Talc CAS: 14807-96-6 ID: C14807966 ≥ 10 - < 20 %	-	Group 3	-	X
Distillates (petroleum), hydrotreated heavy paraffinic CAS: 64742-54-7 ID: C64742547 ≥ 1 - < 5 %	A2	Group 1	Known	X
Distillates (petroleum),	A2	Group 1	Known	X

solvent-dewaxed heavy paraffinic CAS: 64742-65-0 ID: C64742650 ≥ 1 - < 5 %				
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified CAS: 64742-56-9 ID: C64742569 ≥ 1 - < 5 %	A2	Group 1	Known	X
Distillates (petroleum), hydrotreated light paraffinic CAS: 64742-55-8 ID: C64742558 ≥ 1 - < 5 %	A2	Group 1	Known	X
Distillates (petroleum), hydrotreated light naphthenic CAS: 64742-53-6 ID: C64742536 ≥ 1 - < 5 %	A2	Group 1	Known	X
Quartz CAS: 14808-60-7 ID: C14808607 ≥ 1 - < 5 %	A2	Group 1	Known	X

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Harmful 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>)
Graphite 7782-42-5	-	LC50: >100mg/L (96h, <i>Danio rerio</i>)	-	-
Talc 14807-96-6	-	LC50: >100g/L (96h, <i>Brachydanio rerio</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,	-	EC50: =0.03mg/L (48h, <i>Daphnia magna</i>)

		Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)		
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Calcium oxide 1305-78-8	-	LC50: =1070mg/L (96h, Cyprinus carpio)	-	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified 64742-56-9	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Distillates (petroleum), hydrotreated light paraffinic 64742-55-8	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Distillates (petroleum), hydrotreated light naphthenic 64742-53-6	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Acetic acid 64-19-7	-	LC50: =79mg/L (96h, Pimephales promelas) LC50: =75mg/L (96h, Lepomis macrochirus)	-	EC50: =65mg/L (48h, Daphnia magna)

Persistence and degradability**Bioaccumulative potential****Component Information**

Chemical name	Partition coefficient
Acetic acid 64-19-7	-0.17
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**Note:**

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
DOT Marine Pollutant	M
Marine pollutant	Copper metal powder
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Copper metal powder), 9, III, Marine pollutant
Special Provisions	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
Emergency Response Guide Number	171

TDG

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

MEX

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Copper metal powder), 9, III
Special Provisions	274, 331, 335, 375

ICAO (air)

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

IATA

UN number or ID number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Technical Name	Copper metal powder
Transport hazard class(es)	9
Packing group	III
Environmental hazards	Yes
Special Provisions	A97, A158, A179, A197, A215
ERG Code	9L

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Copper metal powder), 9, III

IMDG

UN number or ID number UN3077
UN proper shipping name Environmentally hazardous substance, solid, n.o.s.
Technical Name Copper metal powder
Transport hazard class(es) 9
Packing group III
Marine pollutant indicator M
Marine pollutant name Copper metal powder
Special Provisions 274, 335, 375, 966, 967, 969
EmS-No. F-A S-F
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Copper metal powder), 9, III, Marine pollutant

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.	Inventory Listing Status	Commercial Activity Designation
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	Present	Active
Graphite	7782-42-5	Present	Active
Residual oils (petroleum), hydrotreated	64742-57-0	Present	Active
Talc	14807-96-6	Present	Active
Copper metal powder	7440-50-8	Present	Active
Calcium carbonate	471-34-1	Present	Active
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	Present	Active
Dolomite	16389-88-1	Present	Active
Calcium oxide	1305-78-8	Present	Active
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Present	Active
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified	64742-56-9	Present	Active
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Present	Active
Calcium Sulfonate	NOCAS	-	Unknown *
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Present	Active
12-Hydroxystearic acid	106-14-9	Present	Active
Calcium hydroxide	1305-62-0	Present	Active
Alkylbenzene sulfonic acid	NOCAS	-	Unknown *

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Acetic acid	64-19-7	Present	Active
Hydrocarbon Polymer	NOCAS	-	Unknown *
Water	7732-18-5	Present	Active
Tricalcium bis(orthophosphate)	7758-87-4	Present	Active
Quartz	14808-60-7	Present	Active
Calcium bis(dinonylnaphthalenesulphonate)	1474044-79-5	-	Unknown *
Stearic acid	57-11-4	Present	Active
Magnesium oxide	1309-48-4	Present	Active
Mixture (Olefin Polymer)	NOCAS	-	Unknown *
Sulphuric acid	7664-93-9	Present	Active
Ethenylbenzene polymer with 2-methyl-1,3-butadiene, hydrogenated	68648-89-5	Present	Active
Butylated Hydroxytoluene	128-37-0	Present	Active
Calcium Dodecylbenzene Sulfonate	26264-06-2	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

DSL/NDSL	All components of this product are on the Canadian DSL.
EINECS/ELINCS	All components are listed or exempted.
ENCS	All components are listed or exempted.
IECSC	All components are listed or exempted.
KECL	All components are listed or exempted.
PICCS	All components are listed or exempted.
AIIC	All components are listed on AICIS, or are exempt.
NZIoC	All components are listed or exempted.
TCSI	All components are listed or exempted.

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
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

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 %
Copper metal powder CAS: 7440-50-8 ID: C7440508 ≥ 5 - < 10 %	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
Copper metal powder CAS: 7440-50-8 ID: C7440508 ≥ 5 - < 10 %	-	X	X	-
Acetic acid CAS: 64-19-7 ID: C64197 ≥ 1 - < 5 %	5000 lb	-	-	X

CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

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
Copper metal powder CAS: 7440-50-8 ID: C7440508 ≥ 5 - < 10 %	5000 lb	-
Acetic acid CAS: 64-19-7 ID: C64197 ≥ 1 - < 5 %	5000 lb	-

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Quartz CAS: 14808-60-7 ID: C14808607 ≥ 1 - < 5 %	Carcinogen
Sulphuric acid CAS: 7664-93-9 ID: C7664939 ≥ 0.01 - < 0.1 %	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Distillates (petroleum), hydrotreated heavy naphthenic CAS: 64742-52-5 ID: C64742525 ≥ 30 - < 50 %	X	X	X
Graphite CAS: 7782-42-5 ID: C7782425 ≥ 10 - < 20 %	X	X	X
Talc CAS: 14807-96-6 ID: C14807966 ≥ 10 - < 20 %	X	X	X
Copper metal powder	X	X	X

CAS: 7440-50-8 ID: C7440508 ≥ 5 - < 10 %			
Calcium carbonate CAS: 471-34-1 ID: C471341 ≥ 5 - < 10 %	X	X	X
Distillates (petroleum), hydrotreated heavy paraffinic CAS: 64742-54-7 ID: C64742547 ≥ 1 - < 5 %	X	X	X
Calcium oxide CAS: 1305-78-8 ID: C1305788 ≥ 1 - < 5 %	X	X	X
Distillates (petroleum), hydrotreated light paraffinic CAS: 64742-55-8 ID: C64742558 ≥ 1 - < 5 %	X	X	X
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified CAS: 64742-56-9 ID: C64742569 ≥ 1 - < 5 %	-	X	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic CAS: 64742-65-0 ID: C64742650 ≥ 1 - < 5 %	X	X	X
Distillates (petroleum), hydrotreated light naphthenic CAS: 64742-53-6 ID: C64742536 ≥ 1 - < 5 %	-	X	-
Calcium hydroxide CAS: 1305-62-0 ID: C1305620 ≥ 1 - < 5 %	X	X	X
Acetic acid CAS: 64-19-7 ID: C64197 ≥ 1 - < 5 %	X	X	X
Water CAS: 7732-18-5 ID: C7732185 ≥ 1 - < 5 %	-	-	X
Quartz CAS: 14808-60-7 ID: C14808607 ≥ 1 - < 5 %	X	X	X
Magnesium oxide CAS: 1309-48-4 ID: C1309484 ≥ 0.1 - < 1 %	X	X	X
Sulphuric acid CAS: 7664-93-9 ID: C7664939 ≥ 0.01 - < 0.1 %	X	X	X

Butylated Hydroxytoluene CAS: 128-37-0 ID: C128370 ≥ 0 - < 1.0 %	X	X	X
Calcium Dodecylbenzene Sulfonate CAS: 26264-06-2 ID: C26264062 ≥ 0 - < 1.0 %	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	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 sheetLegend Section 8: Exposure controls/personal protection

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

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

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 U.S. 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)
 Japan 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)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
 International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
 International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
 United Nations World Health Organization (WHO)

Revision date 27-Oct-2025

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