



A CSW Industrials Company

SAFETY DATA SHEET

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1. IDENTIFICATION

Product identifier

Product Name KOPR KOTE® THERMAL

Other means of identification

Product Code(s) 102

Recommended use of the chemical and restrictions on use

Recommended Use Lubricants, Greases and Release Products

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Identification Jet-Lube of Canada Ltd.

Address Jet-Lube of Canada Ltd.
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Edmonton, AB. Canada
T6E-5S8

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Emergency telephone number

Company Emergency Phone Number 1-800-699-6318

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification

| | |
|-----------------------------------|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |



Appearance Copper Bronze**Physical state** Gel**Odor** Petroleum**GHS Label elements, including precautionary statements****Warning****Hazard statements**

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/face protection

Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

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/attention

Skin

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful if swallowed Very toxic to aquatic life with long lasting effects

Unknown acute toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity

30 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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) |
|--|------------|----------|--|---|
| Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc. | 74869-21-9 | 50-70 | - | - |
| Graphite | 7782-42-5 | 10-15 | - | - |
| Copper | 7440-50-8 | 8-13 | - | - |
| Talc | 14807-96-6 | 1-5 | - | - |
| Limestone | 1317-65-3 | 1-5 | - | - |
| Molybdenum (IV) sulfide | 1317-33-5 | 1-5 | - | - |

4. FIRST AID MEASURES

First aid measures

| | |
|---|---|
| General advice | IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. |
| 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. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue 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. Get medical attention if irritation develops and persists. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.



Specific hazards arising from the chemical No information available.

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment 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.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

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 Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-------------------------------------|--------------------------------------|------------------------------|
| Graphite | TWA: 2 mg/m ³ respirable | TWA: 15 mg/m ³ total dust | IDLH: 1250 mg/m ³ |



| 7782-42-5 | particulate matter all forms except graphite fibers | synthetic TWA: 5 mg/m ³ respirable fraction synthetic (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 | TWA: 2.5 mg/m ³ respirable dust | |
|--------------------------------------|--|--|--|--|
| Copper 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 | |
| Talc 14807-96-6 | TWA: 2 mg/m ³ | (vacated) TWA: 2 mg/m ³ | IDLH: 1000 mg/m ³ containing no asbestos and <1% quartz TWA: 2 mg/m ³ | |
| Limestone 1317-65-3 | - | TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³ | TWA: 5 mg/m ³ respirable dust TWA: 10 mg/m ³ total dust | |
| Molybdenum (IV) sulfide 1317-33-5 | TWA: 10 mg/m ³ Mo inhalable particulate matter TWA: 3 mg/m ³ Mo respirable particulate matter | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ Mo | IDLH: 5000 mg/m ³ Mo | |
| Chemical name | Alberta | British Columbia | Ontario TWAEV | Quebec |
| Graphite 7782-42-5 | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ |
| Copper 7440-50-8 | TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ | TWA: 1 mg/m ³ TWA: 0.2 mg/m ³ | TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ | TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ |
| Talc 14807-96-6 | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | TWA: 3 mg/m ³ |
| Limestone 1317-65-3 | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ TWA: 3 mg/m ³ STEL: 20 mg/m ³ | | TWA: 10 mg/m ³ |
| Molybdenum (IV) sulfide 1317-33-5 | TWA: 10 mg/m ³ TWA: 3 mg/m ³ | TWA: 3 mg/m ³ TWA: 10 mg/m ³ | TWA: 10 mg/m ³ TWA: 3 mg/m ³ | TWA: 10 mg/m ³ |

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls**Engineering controls**

Showers
Eyewash stations
Ventilation systems.

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

If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection

Wear suitable gloves. Impervious gloves.

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

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or



smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

| | |
|-----------------------|--------------------------|
| Physical state | Gel |
| Appearance | Copper Bronze |
| Odor | Petroleum |
| Color | No information available |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks Method</u> |
|--|--------------------------|-----------------------|
| pH | UNKNOWN | |
| Melting / freezing point | 315 °C | None known |
| Boiling point / boiling range | 316 °C | |
| Flash Point | > 310 °C | Open cup |
| Evaporation Rate | < No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability limit | 7% | |
| Lower flammability limit | 0.9% | |
| Vapor pressure | &<0.01&20 | None known |
| Vapor density | >5 | None known |
| Relative density | 1.15 | |
| Water Solubility | No data available | |
| Solubility(ies) | Soluble | None known |
| Partition coefficient: n-octanol/water | 0 | |
| Autoignition temperature | >315 °C | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

Other Information

| | |
|-----------------------------------|--------------------------|
| Softening Point | No information available |
| Molecular Weight | No information available |
| VOC Content (%) | None |
| Liquid Density | No information available |
| Bulk Density | No information available |
| Particle Size | No information available |
| Particle Size Distribution | No information available |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of Hazardous Reactions | None under normal processing. |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | None known based on information supplied. |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. |

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information 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. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). Irritating to eyes. |
| 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. |

Information on toxicological effects

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute Toxicity

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

ATEmix (oral) 2,280.00 mg/kg

Unknown acute toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity
 30 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|-------------|--------------------------------------|
| Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc. | = 2280 mg/kg (Rat) | - | - |
| Molybdenum (IV) sulfide | - | - | > 2820 mg/m ³ (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. Irritating to skin. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Irritating to eyes. |
| Respiratory or skin sensitization | No information available. |

Germ cell mutagenicity No information available.

Carcinogenicity Classification based on data available for ingredients. Based on available data, the classification criteria are not met.

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

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--------------------|-------|---------|-----|------|
| Talc 14807-96-6 | - | Group 3 | - | X |

Legend

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

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

X - Present

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 Very toxic to aquatic life with long lasting effects.

| Chemical name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|--|--|---|----------------------------|---|
| Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc. | >1001 mg/l | 96h LC50: > 2000 mg/L (Salmo gairdneri) | - | - |
| Copper | EC50 96 h: 0.031 - 0.054 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: 0.0426 - 0.0535 mg/L static (Pseudokirchneriella subcapitata) | LC50 96 h: 0.0068 - 0.0156 mg/L (Pimephales promelas) LC50 96 h: < 0.3 mg/L static (Pimephales promelas) LC50 96 h: = 0.052 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 0.112 mg/L flow-through (Poecilia reticulata) LC50 96 h: = 0.2 mg/L flow-through (Pimephales promelas) LC50 96 h: = 0.3 mg/L semi-static (Cyprinus carpio) LC50 96 h: = 0.8 mg/L | - | EC50 48 h: = 0.03 mg/L Static (Daphnia magna) |



| | | | | |
|------|---|---|---|---|
| | | static (Cyprinus carpio) LC50 96 h: = 1.25 mg/L static (Lepomis macrochirus) | | |
| Talc | - | 96h LC50: > 100 g/L (Brachydanio rerio) | - | - |

Persistence and Degradability No information available.

Bioaccumulation There is no data for this product.

Mobility No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment 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.

California Hazardous Waste Codes 141

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

| Chemical name | California Hazardous Waste |
|---------------------|----------------------------|
| Copper 7440-50-8 | Toxic |

14. TRANSPORT INFORMATION

- DOT** NOT REGULATED
- TDG** NOT REGULATED
- MEX** NOT REGULATED
- ICAO** NOT REGULATED
- IATA** NOT REGULATED
- Proper Shipping Name** NON REGULATED
- IMDG/IMO** NOT REGULATED
- RID** NOT REGULATED
- ADR** NOT REGULATED
- ADN** NOT REGULATED

15. REGULATORY INFORMATION



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

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

| | |
|----------------------|---|
| TSCA | Contact supplier for inventory compliance status. |
| DSL/NDSL | Not determined. Contact supplier for inventory compliance status. |
| EINECS/ELINCS | Complies. |
| ENCS | Not determined. |
| KECL | Not determined. |
| PICCS | Complies. |
| AICS | Not determined. |

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
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

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 | CAS No | Weight-% | SARA 313 - Threshold Values % |
|--------------------|-----------|----------|-------------------------------|
| Copper - 7440-50-8 | 7440-50-8 | 8-13 | 1.0 |

| | |
|--|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

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 7440-50-8 | | X | 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 | RQ |
|---------------|--------------------------|---------------------|----|
|---------------|--------------------------|---------------------|----|



| | | Substances RQs | |
|---------------------|---------|----------------|--|
| Copper 7440-50-8 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

| Chemical name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|--------------------------------------|------------|---------------|--------------|--------------|----------|
| Graphite 7782-42-5 | X | X | X | X | |
| Copper 7440-50-8 | X | X | X | X | X |
| Talc 14807-96-6 | X | X | X | X | X |
| Limestone 1317-65-3 | X | X | X | X | |
| Molybdenum (IV) sulfide 1317-33-5 | | X | | | |

16. OTHER INFORMATION

NFPA Health hazards 1 Flammability 1 Instability 0 Physical and Chemical Properties -
HMIS Health hazards 1 Flammability 1 Physical hazards 0 Personal Protection X
*Chronic Hazard Star Legend * = Chronic Health Hazard*

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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

