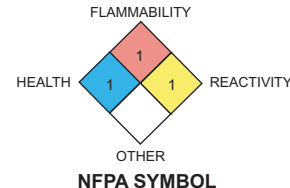


Health	1
Flammability	1
Reactivity	1
PPE	B

MATERIAL SAFETY DATA SHEET



KOPR-KOTE® THERMAL GRADE

HMIS SYMBOL

SECTION 1 - PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: **KOPR-KOTE® Thermal Grade**
 Chemical Family: Mixture
 Use: Lubricating grease as an anti-seize.
 Manufacturer/Supplier: Jet-Lube of Canada Ltd.
 3820 - 97 Street
 Edmonton, Alberta
 Canada T6E 5S8

Phone: (780) 463-7441 Fax: (780) 463-7454
 CCOHS: 1-800-263-8466 Emergency: (713) 674-7617

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	Natural Graphite	Copper	Molybdenum Disulphide
CAS No	7782-42-5	7440-50-8	1317-33-5
Wt. %	20 Max.	10 Max.	1 - 10
OSHA PEL	2.5 mg/m ³	1 mg/m ³ (dust & mists)	15 mg/m ³ , as Mo
ACGIH TLV	2 mg/m ³	1 mg/m ³ (dust & mists)	10 mg/m ³ , as Mo
LD50	Not Determined	3.5 mg/kg (mouse)	>6 g/kg (oral, rat)
LC50	Not Determined	N/A	N/A
Other	N/A	N/A	N/A

SECTION 3 - HAZARDS IDENTIFICATION

Route of Entry: Eyes, ingestion, skin
 Eyes: May cause irritation.
 Ingestion: May cause diarrhea.
 Skin: May cause possible rash for persons with hypersensitivity.
 Allergens: None Known

SECTION 4 - FIRST AID MEASURES

Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help.
 Ingestion: Do not induce vomiting. Wash out mouth. Contact a physician immediately.
 Skin: Remove by wiping or with a waterless hand cleaner, followed by washing with soap and water.

SECTION 5 - FIRE FIGHTING MEASURES

Flammability: Nil at ambient temperature.
 Extinguishing Media: Foam, dry chemical, halon, carbon dioxide, sand, earth or water mist.
 Unsuitable Extinguishing Media: Water jet.
 Flash Point (COC): 293°C (560°F)
 Explosive Properties: LEL - 0.9% UEL - 7%
 Autoignition Temperature: >360°C (680°F)
 Hazardous Combustion Products: Oxides of carbon, smoke and irritating vapors as product of incomplete combustion.
 Protective Equipment: Self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spillage: Scoop up excess, then wipe down the affected area and pick up residue with diatomaceous earth to avoid a walking hazard.
 Environmental Precautions: Do not allow to enter drains.

SECTION 7 - HANDLING AND STORAGE

Handling Procedures: No special handling precautions necessary. Do not pressurize, cut, heat or weld empty containers.
 Storage Requirements: Store in a cool, well ventilated place.
 Engineering Controls: If user's operation generates vapors or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make up air should always be supplied to balance air removed by exhaust ventilation. Ensure eyewash station and safety shower are close to work station.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protection Equipment (PPE's)
 Respiratory Protection: None required.
 Hand Protection: Protective gloves for hypersensitive persons.
 Eye Protection: Protective glasses if applied to moving parts.
 Body Protection: Protective overalls.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Paste
 Odour Threshold: Not Determined
 Vapor Pressure: <0.01 kPa
 Boiling Point: >370°C (700°F)
 pH: Neutral
 Density: 1.10 kg/L
 Evaporation Rate (Butyl Acetate = 1.0): <0.01
 Odour: Light Petroleum
 Specific Gravity: N/A
 Vapor Density: Not Determined
 Freezing Point: Not Determined
 Melting Point: 91°C (195°F)

SECTION 10 - STABILITY AND REACTIVITY

Stability: Chemically stable under normal conditions.
 Conditions to Avoid: Powerful sources of ignition, extreme temperatures.
 Materials to Avoid: Strong acids and oxidizing agents.
 Hazardous Decomposition Products: May release CO₂, smoke and irritating vapors when heated to decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Exposure Limit of Material: See Section 2
 LC50 of Ingredients, Species and Routes: See Section 2
 LD50 of Ingredients, Species and Routes: See Section 2
 Teratogenicity, Embryotoxicity and/or Fetotoxicity: Not Available
 Mutagenicity: Not Available
 Effects of Long-Term (Chronic) Exposure: Long term dermal application may produce possible skin irritation. Elevated temperatures or mechanical action may form vapors or fumes. Inhalation of oil mists or vapors from hot oil may cause irritation of the upper respiratory tract.
 Carcinogen: NTP: No IARC: No OSHA: No

SECTION 12 - ECOLOGICAL INFORMATION

Possible Effects: May generate oil fractions that could act as a marine pollutant in extreme cases, but is highly unlikely.
 Behavior: Relatively well behaved. Bioaccumulation potential almost nil.
 Environmental Fate: Highly unlikely to cause widespread contamination.

SECTION 13 - DISPOSAL CONSIDERATIONS

Consult federal, provincial and local regulations for disposal of petroleum products.

SECTION 14 - TRANSPORT INFORMATION

TDG (Canada): The mixture is not specifically listed in the Canadian Transportation of Dangerous Goods regulations. Mixture has a component that may be classified as a marine pollutant, but amount is insignificant. Note the following modes of transport.
 Land and Rail: Not Regulated
 Marine: Regulated

Requirements for Marine Transport:

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, N.O.S. (Copper)
 UN Number: UN3077
 Packing Group: III
 Classification: Class 9
 Labelling Requirements: Class 9 and Marine Pollutant Labels
 Placard Requirements: None

SECTION 15 - REGULATORY INFORMATION

WHMIS: Not Regulated
 DSL: All components listed.
 CPR Compliance: This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations. The MSDS contains all of the information required by these regulations.

SECTION 16 - OTHER INFORMATION

CPR - Controlled Product Regulations
 DSL - Domestic Substance List

As of issue date, the information contained herein is accurate and reliable to the best of Jet-Lube of Canada Ltd.'s knowledge. Jet-Lube of Canada Ltd. does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the users' responsibility to satisfy themselves that the information offered for their consideration is suitable for their particular use.

Prepared By: **Jet-Lube of Canada Ltd. - Laboratory**
 Last Date of Revision: **September 26, 2003**