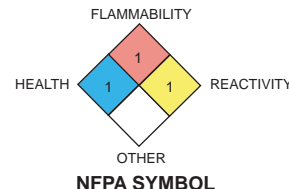


Health	1
Flammability	1
Reactivity	1
PPE	B

**HMIS SYMBOL**

**MATERIAL SAFETY DATA SHEET**

**API MODIFIED**



**SECTION 1 - PRODUCT NAME AND COMPANY IDENTIFICATION**

Product Name: **API-MODIFIED**  
 Chemical Family: Mixture  
 Use: Lubricating grease for tubing, casing and line pipe.  
 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:**  
 CANUTEC Phone: (613) 996-6666 Cellular: \*666 TTY/TDD: 1-888-675-6863

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Components	Natural Graphite	Copper	Lead	Lime
CAS No	7782-42-5	7440-50-8	7439-92-1	1305-78-8
Wt. %	20 Max.	10 Max.	30 Max.	10 Max.
OSHA PEL	2.5 mg/m <sup>3</sup> (dust)	1 mg/m <sup>3</sup> (dust & mists)	0.05 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
ACGIH TLV	2 mg/m <sup>3</sup> (dust)	1 mg/m <sup>3</sup> (dust & mists)	0.05 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
LD50	Not Determined	3.5 mg/kg (mouse)	Not Available	Not Available
LC50	Not Determined	N/A	N/A	Not Available
Other	N/A	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.

**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: Use dry chemicals, foam, halon, carbon dioxide, sand, earth or water mist.  
 Flash Point (COC): >221°C (430°F)  
 Explosive Properties: LEL - 0.9% UEL - 7%  
 Autoignition Temperature: >260°C (500°F)  
 Hazardous Combustion Products: Oxides of carbon, smoke and irritating vapors as products 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: Light Petroleum  
 Odour Threshold: Not Determined  
 Vapor Pressure: <0.01 kPa  
 Boiling Point: >274°C (525°F)  
 pH: Neutral  
 Density: 1.70 kg/L  
 Evaporation Rate (Butyl Acetate = 1.0): <0.01  
 Specific Gravity: 1.70  
 Vapor Density: Not Determined  
 Freezing Point: Not Determined  
 Melting Point: 138°C (280°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 COx, 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 nil.  
 Environmental Fate: Highly unlikely to cause widespread contamination. May be toxic to marine and land organisms.

**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  
 Labeling Requirements: Class 9 and Marine Pollutant Labels  
 Placard Requirements: None  
 Labeling Requirements: Limited Quantities label for containment less than LQI of 5 L net contents per containment. Class 9 & Marine Pollutant label if >5 L net contents per containment or large containment.  
 Placard Requirements: Limited Quantities - None Required  
 Large Containment - Class 9 & Marine Pollutant

**SECTION 15 - REGULATORY INFORMATION**

WHMIS: D2A/B  
 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: October 6, 2006