

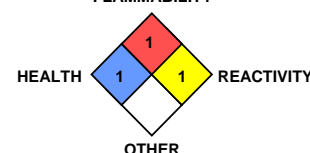
Health	1
Flammability	1
Reactivity	1
PPI	B

HMIS SYMBOL

MATERIAL SAFETY DATA SHEET

API-MODIFIED ARCTIC BASE

FLAMMABILITY



NFPA SYMBOL

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: **API-MODIFIED ARCTIC BASE**
 Chemical Family: Mixture
 Use: Lubricating grease for tubing, casing and line pipe.
 Manufacturer/Supplier: Jet-Lube of Canada Ltd.
 3820 – 97 Street NW
 Edmonton, Alberta
 Canada T6E 5S8
 Phone: (780) 463-7441 Fax: (780) 463-7454
 CCOHS: 1-800-668-4284

Emergency:
 CANUTEC PH: (613) 996-6666 Cell: *666 TTY/TDD: 1-888-675-6863

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	Graphite	Copper	Lead	Calcium oxide	Zinc
CAS NO.	7782-42-5	7440-50-8	7439-92-1	1305-78-8	7440-66-6
WT %	1 - 20	1 - 10	10 - 30	1 - 3	5 - 13
OSHA PEL	5 mg/m ³	1 mg/m ³ (dust)	0.05 mg/m ³	5 mg/m ³	10 mg/m ³
ACGIH TLV	5 mg/m ³	1 mg/m ³ (dust)	0.05 mg/m ³	2 mg/m ³	5 mg/m ³
LD50	Not Determined	3.5 mg/kg	Not Available	Not Available	1400 mg/kg (oral, rat)
LC50	Not Determined	N/A	N/A	Not Available	Not Available
OTHER:	N/A	N/A	N/A	N/A	N/A

SECTION 3 - HAZARDS IDENTIFICATION

Route of Entry: Eyes, Inhalation, Ingestion, Skin
 Eyes: May cause irritation to eyes.
 Inhalation: Viscous nature may block breathing passages if inhaled.
 Ingestion: May cause diarrhea if ingested.
 Skin: May cause irritation after prolonged skin exposure, especially for persons with hyper sensitivity.

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.
 Inhalation: Clear air passage. If breathing difficulty continues seek medical help.

SECTION 5 - FIRE FIGHTING MEASURES

Flammability: Nil at ambient temp
 Extinguishing Media: Use dry chemicals, foam, halon, CO₂
 Flash Point (COC): >221°C (430°F)
 Explosive Properties: LEL – 0.9% UEL - 7%
 Autoignition Temp: >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 wipes down the affected area and pick up residue with diatomaceous earth to avoid a walking hazard.
 Environmental Precautions: Do not allow product to enter into 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 mists, 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 Protective 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 Odor: Light Petroleum
 Odor Threshold: Not Determined Specific Gravity (Typical): 1.70
 Vapor Pressure: <0.01 kPa Vapor Density: Not Determined
 Boiling Point: Not Determined Melting Point: 138°C (280°F)
 pH: Neutral %VOC Nil
 Density (Typical): 1.70 g/cm³
 Evaporation Rate (Butyl Acetate = 1.0): <0.01

SECTION 10 - STABILITY AND REACTIVITY

Stability: Chemically stable under normal conditions. No photoreactive agents.
 Conditions to Avoid: Powerful sources of ignition and extreme temperatures.
 Materials to Avoid: Strong acids and oxidizing agents.
 Hazardous Decomposition Products: May release CO_x, 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 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, 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. Do not incinerate.

SECTION 14 - TRANSPORT INFORMATION

TDG (Canada): The mixture is not specifically listed in the Canadian Transportation of Dangerous Goods regulations.
 Land & Rail: Not Regulated
 Marine: Regulated
 Shipping Name: Environmentally Hazardous Substance, N.O.S (copper)
 UN No.: 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 5L net Contents per containment.
 Placard Requirements: Class 9 & Marine Pollutant label if >5L net contents per containment or large containment.
 Limited Quantities – Non Required
 Large Containment - Class 9 & Marine Pollutant

SECTION 15 - REGULATORY INFORMATION

WHMIS: B, D-2
 DSL: All components listed
 CPR Compliance: This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by those 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: **January 19, 2012**