

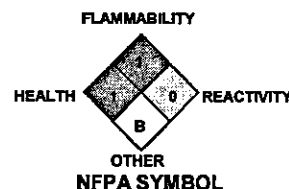
Health	1
Flammability	1
Reactivity	0
PPI	B

HMIS SYMBOL

## MATERIAL SAFETY DATA SHEET

### Marine Grade Anti-Seize

270-043



#### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Marine Grade Anti-Seize** *MAKAS-1*  
 Chemical Family: Mixture *MAKAS-10*  
 Use: Equipment lubrication, lubricant for threaded connections or slides  
 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	Natural Graphite	Limestone	Molybdenum Disulphide	Zinc Oxide
CAS NO.	7782-42-5	1317-65-3	1317-33-5	1314-13-2
WT %	10 - 30	1 - 5	1 - 5	5 - 10
OSHA PEL	2.5 mg/m <sup>3</sup>	Not Available	15 mg/m <sup>3</sup> , as Mo	5 mg/m <sup>3</sup>
ACGIH TLV	2.0 mg/m <sup>3</sup>	Not Available	15 mg/m <sup>3</sup> , as Mo	5 mg/m <sup>3</sup>
LD50	Not Available	Not Available	>6 g/kg (rat, oral)	7950 mg/kg (mouse)
LC50	Not Available	Not Available	Not Available	Not Available

#### 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 hypersensitivity.

#### SECTION 4 - FIRST AID MEASURES

Eyes: Flush with water for 15 minutes. 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, CO<sub>2</sub>  
 Flash Point (OC): >221°C (430°F)  
 Explosive Properties: LEL - 0.9% UEL - 7%  
 Autoignition Temp: >260°C (500°F)  
 Explosion Data: Sensitivity to Static Discharge - Not Available  
 Sensitivity to Impact - Not Available  
 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

Exposure Limits: See Section 2 for Component Exposure Limits  
 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 Threshold: Not Available  
 Vapor Pressure: <0.01 kPa  
 Boiling Point: Not Available  
 pH: Neutral  
 Density: 1.27 g/cm<sup>3</sup>  
 Evaporation Rate (Butyl Acetate = 1.0): <0.01  
 Coefficient of Water/Oil Distribution: Not Available  
 Odor/Appearance: Slight/Blue  
 Specific Gravity: 1.27 Typical  
 Vapor Density: Not Available  
 Melting Point: 232°C  
 % Volatile: Nil  
 Water Solubility: Nil  
 Freezing Point: Not Available

#### 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: Reactive and oxidizing agents.  
 Hazardous Decomposition Products: May release CO<sub>x</sub>, smoke and irritating vapors when heated to decomposition.

#### SECTION 11 - TOXICOLOGICAL INFORMATION

Effects of Short-Term (Acute) Exposure: Short term toxic effects not known.  
 Effects of Long-Term (Chronic) Exposure: Long term dermal application may produce possible skin irritation.  
 Irritancy of Product: Not Available  
 Skin Sensitization: Not Available  
 Respiratory Sensitization: Not Available  
 Teratogenicity, Embryotoxicity and/or Fetotoxicity: Not Available  
 Mutagenicity: Not Available  
 Carcinogen: IARC: No OSHA: No  
 Name of Synergistic Products/Effects: Not Available

#### 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 notable 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: Not Regulated  
 Air: Not Regulated  
 Shipping Name: Not Applicable  
 UN No.: Not Applicable  
 Packing Group: Not Applicable  
 Classification: Not Applicable  
 Labeling Requirements: Not Applicable  
 Placard Requirements: Not Applicable

#### SECTION 15 - REGULATORY INFORMATION

WHMIS: Not Controlled  
 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: July 15, 2015