

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product name: DEEP LUBE

Chemical family: Aerosolized mixture.

Product use/class: Used as a penetrant, and to lubricate and protect metal surfaces from corrosion

Supplier's name and address:

DEEP LUBE OF CANADA

7 Hiscott St.

St. Catharines, ON, L2R 1C7

Telephone: 905-704-1158

Manufacturer's name and address:

Refer to Supplier.

Emergency Tel. #: 905-651-1420

WHMIS CLASS: A, B5, D2B

SECTION II - HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>wt.%</u>	<u>LC₅₀ / 4 Hrs (Rat, inh.)</u>	<u>LD₅₀ mg/kg</u>	
				<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Aliphatic petroleum oil	8052-41-3	40 - 50	> 5500 mg/m ³	> 5000	> 3000
Petroleum based oil	64742-65-0	40 - 50	N/Av	> 5000	> 5000
A70-Hydrocarbon propellant	68476-85-7	12 - 17	N/Av	N/Av	N/Av

SECTION III - PHYSICAL DATA

Physical State, odour and appearance: Light amber liquid aerosol, lemon odour.

Coefficient of water/oil distribution: N/Av

Viscosity (Centistokes @ 40°C): 7.06 (liquid concentrate)

Vapour pressure (PSI @ 70°C): 60.0.

Melting / Freezing point: N/Av

Vapour density (Air = 1): >1

Volatiles, %: 70.0

Absolute pressure of container: 345 kPa @ 21.1°C

Odour threshold: N/Av

Specific gravity: 0.787

Boiling point: N/Av

pH: N/Av

Evaporation rate (BuAe = 1): N/Av

Solubility in water: Insoluble.

SECTION IV - FIRE AND EXPLOSION DATA

Conditions of flammability: Flammable aerosol.

Flash point (Method): 10°C / 50°F (TAG OPEN CUP A.S.T.M. D-1310) (liquid concentrate)

Upper flammable limit %: 9.7 (liquid concentrate)

Lower flammable limit %: 1.9 (liquid concentrate)

Flame projection length: > 15 cm but < 100 cm.

Flashback observed: No

Auto-ignition temperature: N/Av

Means of extinction: Use foam, carbon dioxide, dry chemical or water fog. Do not use water jet, as this may spread burning material.

Sensitivity to mechanical impact/static discharge: May be sensitive to static discharge. Not expected to be sensitive to mechanical impact.

Special Fire Fighting Procedures: Wear self-contained, positive pressure breathing apparatus (SCBA) and complete personal protective equipment. Move containers from fire area if it can be done without risk. Water spray may only be useful in cooling equipment exposed to heat and flame. Shield personnel to protect from venting or rupturing cans. Avoid spreading burning liquid with water spray used for cooling purposes.

Unusual Fire and Explosion Hazards: Contents under pressure. Container may explode if heated. Vapours are heavier than air and collect in low-lying areas. The vapours may travel considerable distances and flashback to a distant source of ignition. Liquid concentrate may float and can be re-ignited at the water's surface.

Hazardous Combustion Products: Carbon oxides, sulfur oxides, nitrogen oxides, phosphorous oxides and other toxic and irritating fumes and smoke.

SECTION V - REACTIVITY DATA

Stability: Stable under ambient pressure and temperature. Hazardous polymerization will not occur.

Incompatible materials: Strong oxidizing agents.

Conditions of reactivity: Stable under ambient pressure and temperature. Avoid heat, sparks, flame, and incompatible material.

Hazardous decomposition products: None known. Refer to 'Hazardous combustion products', Section 4.

SECTION VI - TOXICOLOGICAL PROPERTIES

**** Routes of exposure and acute/chronic effects ****

Exposure limit:

ACGIH - TLV: Aliphatic petroleum oil (Stoddard solvent) – 100 ppm; Petroleum based oil – 5 mg/m³ (As Oil mist, mineral); A70-Hydrocarbon propellant (L.P.G.) – 1000 ppm (As 'Aliphatic hydrocarbon gases').

OSHA - PEL: Aliphatic petroleum oil (Stoddard solvent) – 500 ppm; Petroleum based oil – 5 mg/m³ (As Oil mist, mineral); A70-Hydrocarbon propellant (L.P.G.) – 1000 ppm.

Inhalation: Inhalation may cause irritation to the nose, throat and upper respiratory tract. Symptoms may include headache, nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue, nausea, vomiting and unconsciousness.

Skin: Contact with liquid may cause mild to moderate irritation. If sprayed directly onto the skin, symptoms of frostbite may be experienced including numbness, prickling and itching.

Eyes: Exposure to high vapor concentrations or contact with liquid may cause mild irritation. Symptoms may include tearing and redness. If product is sprayed directly into the eyes, contact could cause freezing of the eye.

Ingestion: Ingestion is not a typical route of exposure for an aerosol. However, if the product is sprayed directly into mouth, it may cause irritation to the mouth, throat and stomach. Symptoms may include nausea, vomiting and diarrhea. Ingestion could cause aspiration of the chemical into the lungs. Aspiration can result in life-threatening lung injury.

Chronic effect: Prolonged or repeated exposure may cause drying and cracking of the skin (dermatitis).

Carcinogenicity: None of the ingredients are classified as carcinogenic by IARC or ACGIH.

Reproductive effects, Teratogenicity, Mutagenicity: None known.

Sensitization to material: Not expected to cause allergic skin or respiratory sensitization reactions.

Synergistic materials: N/Av.

Conditions aggravated by exposure: Pre-existing skin and respiratory disorders.

SECTION VII - FIRST AID

Inhalation: Remove patient from contaminated area. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Obtain medical attention.

Skin: Remove contaminated clothing. Wash skin thoroughly with mild soap and lukewarm, running water. Obtain medical attention if irritation persists. Launder contaminated clothing.

Eyes: Immediately flush eyes with lukewarm water for at least 15 minutes. Obtain medical attention if irritation persists.

Ingestion: If swallowed, do NOT induce vomiting. Obtain medical attention immediately! If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person.

SECTION VIII - PREVENTIVE MEASURES

Spill, leak or release: Spill unlikely from aerosol cans. If leaks do occur, restrict access to spill area. Wear appropriate protective equipment. Eliminate all sources of heat, sparks, flame and ignition. Ventilate area of release. Leaking cans should be placed in plastic bag or open pail until pressure has dissipated. Absorb any spilled liquid concentrate with inert, non-combustible absorbent material (e.g. sand), then place absorbent material in a suitable, closed and labelled container for later disposal (see below). Do not allow to enter sewers or confined spaces. Notify the appropriate authorities as required.

Waste disposal: Handle according to recommendations listed below. Do not puncture or incinerate cans. Improper disposal can cause damage to the environment. Dispose of in accordance with all applicable government Regulations.

SECTION VIII - PREVENTIVE MEASURES CONTINUED

***** PROTECTIVE EQUIPMENT *****

Respiratory protection: For prolonged exposures or if the TLV is exceeded, wear NIOSH-approved respirator. Advice should be sought from respiratory protection specialists.

Ventilation: Use in well-ventilated area. General or local exhaust ventilation may be required.

Protective gloves: Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye protection: Safety goggles are recommended to prevent mists from entering the eyes.

Other protective equipment: An eyewash station and safety shower should be made available in the immediate working area. Impervious clothing and rubber boots, and any other safety equipment may also be required, as per workplace standards.

***** STORAGE & HANDLING *****

Storage and handling conditions:

Handling: This material is a flammable, harmful aerosol. Wear protective equipment during handling. Use in well ventilated area. Avoid contact with eyes, skin and clothing. Avoid inhalation. Wearing contact lenses is inadvisable. Keep away from children. Do not use near sources of heat, flame, sparks or ignition sources. Ground all equipment during handling. Do not puncture or incinerate cans. Use caution when opening containers. Keep away from incompatibles. Keep the cap on the can when not in use, to protect the release valve. Wash thoroughly after handling.

Storage: Store in a cool (less than 48.9°C), dry, well-ventilated area away from incompatibles, heat and flame. No smoking in the area. Inspect containers periodically for damage or leaks.

Special Shipping Information – Canadian Transportation of Dangerous Goods Regulations (TDGR):

Proper Shipping Name: AEROSOLS

UN No.: UN1950

Primary Class(es): 2.1

Subsidiary Class(es): None.

Packing Group: Not applicable

Other Shipping Information: This product may be shipped by ground within Canada, as a 'Consumer commodity' or a 'Limited Quantity'. Refer to the TDGR Section 1.17 for additional Limited Quantity and Consumer Commodity requirements, if shipping under this exemption.

SECTION IX - PREPARATION INFORMATION

Prepared by: ICC The Compliance Center Inc. for Deep Lube of Canada

Telephone number: 905-704-1158 (Deep Lube of Canada)

Preparation date: February 21, 2007.

Additional notes or references:

Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists

A.S.T.M.: American Society for Testing and Materials

CAS: Chemical Abstract Services

IARC: International Agency for Research on Cancer

inh: Inhalation

N/Ap: not applicable

N/Av: not available

NIOSH: National Institute of Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

PEL: Permissible Exposure Limit

RTECs: Registry of Toxic Effects of Chemical Substances

TLV: Threshold Limit Values

WHMIS: Workplace Hazardous Materials Information System

- Reference:
1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2006.
 2. International Agency for Research on Cancer Monographs, searched 2007.
 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2007 (Chempendium and RTECs).
 4. Material Safety Data Sheet from manufacturer.

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