

SECTION 1 - PRODUCT IDENTIFICATION

Product identifier/Trade name: LP-2000
Product code/Internal Identification: 22340
Product use/Description: Anti-wear and extreme pressure lubricant and penetrant. 340 g aerosol container.
Product chemical name: N/Ap
Chemical family: N/Ap
MSDS preparation/review date: September 06, 2009
Supplier identifier: Asalco Inc.
44, ch. Des Ursulines, Stanstead, Québec (Canada), J0B 3E0
Telephone 819-876-2211; Fax 819-876-5373; Internet www.asalco.com
Manufacturer identifier: Same as supplier
Emergency phone number: (613) 996-6666 (CANUTEC)
WHMIS Classification: A – Compressed gas
B5 – Flammable aerosol
D2B – Toxic material with other toxic effects

SECTION 2 - CHEMICAL COMPOSITION / HAZARDOUS INGREDIENTS

Hazardous Ingredients	CAS #	% (weight)	LD ₅₀ (route, species)	LC ₅₀ (species)
Zinc C1-C14 alkyldithiophosphate	68649-42-3	7-13	N/Av	N/Av
Paraffinic oil	64742-52-5	10-30	N/Av	N/Av
Petroleum hydrocarbon	64742-53-6	10-30	N/Av	N/Av
Petroleum distillate	64742-88-7	10-30	N/Av	N/Av
Acetone	67-64-1	1-5	5800 mg/kg (Oral, rat)	71000 mg/m ³ 4 Hrs (rat)
d-Limonene	5989-27-5	1-5	4400 mg/kg (Oral, rat) >5000 mg/kg (Dermal, rabbit)	N/Av
Isobutane	75-28-5	3-7	N/Av	368000 ppm 4 Hrs (mouse)
Propane	74-98-6	7-13	N/Av	N/Av

SECTION 3 - HAZARDS IDENTIFICATION**Emergency Overview**

DANGER! Extremely flammable aerosol. Contents under pressure. Causes eye and skin irritation. May cause allergic skin reaction. Harmful if inhaled or swallowed. May cause headache, nausea, dizziness and other central nervous system effects.

POTENTIAL HEALTH EFFECTS

Primary entry route(s): Skin contact, skin absorption, eye contact, ingestion and inhalation.

Effects of short-term (acute) exposure:**Inhalation:**

May cause irritation to the nose, throat and respiratory tract, and central nervous system depression. Symptoms may include headache, nausea, vomiting, loss of coordination and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue, nausea, vomiting and unconsciousness.

Skin:

Direct skin contact may cause moderate to severe irritation. Product may be absorbed through the skin. If sprayed directly onto the skin, symptoms of frostbite may be experienced including numbness, prickling and itching.

Eye:

Direct eye contact may cause moderate eye irritation. Symptoms may include redness, stinging, tearing and pain. If product is sprayed directly into the eyes, contact could cause freezing of the eye.

Ingestion:

If the product is sprayed directly into mouth, it may cause irritation to the mouth, throat and stomach. Product may present an aspiration hazard, and cause life-threatening lung injury following ingestion.

Effects of long-term (chronic) exposure:

Prolonged or repeated contact may cause drying, cracking and defatting of the skin (dermatitis).

Other important hazards:

Refer to Section 11, Toxicological Information, for further information.

SECTION 4 - FIRST AID MEASURES**Inhalation:**

Remove source of contamination or have victim move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention immediately.

Skin contact:

Flush contaminated area with lukewarm, gently running water for at least 20 minutes or until the chemical is removed. Under running water, remove contaminated clothing. If irritation persists, obtain medical advice. Completely decontaminate clothing before reuse or discard.

Eye contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention immediately.

Ingestion:

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. Obtain medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES**Fire hazards/conditions of flammability:**

EXTREMELY FLAMMABLE AEROSOL. Material will ignite when exposed to sources of high heat or flame. Closed containers are contained under pressure and may explode if exposed to excess heat. Vapours are heavier than air and collect in confined and low-lying areas. Flame projection is > 15 cm but < 100 cm and no flashback observed.

Flash point (Method): -18 °C (Tag Closed Cup) (Acetone)

Lower flammable limit (% by volume): 1.1

Upper flammable limit (% by volume): 12.6

Sensitivity to mechanical impact: Aerosols may explode or become projectiles after a mechanical impact.

Sensitivity to static discharge:

This material may be sensitive to static discharge when vapours are present between the lower and upper flammable limits.

Auto-ignition temperature: N/Av

Suitable extinguishing media: Carbon dioxide, dry chemical powder and appropriate foam.

Special fire-fighting procedures/equipment:

During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection.

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk.

Water spray may be useful in cooling equipment and cans exposed to heat and flame.

Hazardous combustion products:

Carbon monoxide, carbon dioxide and other irritant gases, which may include toxic constituents.

SECTION 6 - ACCIDENTAL RELEASE MEASURES**Personal precautions:**

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Remove all ignition sources. Remove or isolate flammable and combustible materials. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).

Spill response/Cleanup:

Ventilate area of release. Eliminate all sources of ignition. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13).

Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Environmental precautions:

Confine spill, preventing it from entering sewer lines or waterways. Dispose of as per local, state and federal regulations.

SECTION 7 - HANDLING AND STORAGE**Safe handling procedures:**

Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Do not use near welding operations, flames or hot surfaces. Handling equipment should be properly grounded. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing vapours or mists. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of vapours or mists. Keep away from incompatible materials such as oxidizing materials. Keep containers closed when not in use. Empty containers are always dangerous. Assume that empty containers contain residues which are hazardous.

Storage requirements:

Store in a cool (< 50°C), well-ventilated area, away from heat and ignition sources. Store away from incompatible materials. Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

Incompatible materials:

STRONG OXIDIZING MATERIALS (e.g. Chlorides, Peroxides), strong acids (e.g. Nitric acid).

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits: There is no available data for the product. See below for individual ingredient exposure limits.

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Zinc C1-C14 alkyldithiophosphate	N/Av	N/Av	N/Av	N/Av
Paraffinic oil	N/Av	N/Av	N/Av	N/Av
Petroleum hydrocarbon	N/Av	N/Av	N/Av	N/Av
Petroleum distillate	N/Av	N/Av	N/Av	N/Av
Acetone	750 ppm	1000 ppm	500 ppm	750 ppm
d-Limonene	N/Av	N/Av	*30 ppm	N/Av
Isobutane	N/Av	N/Av	*1000 ppm	N/Av
Propane	1000 ppm	N/Av	*1000 ppm	N/Av

*Note: The ACGIH TLV listed above for d-Limonene is an AIHA WEEL. The ACGIH TLV listed above for Liquefied petroleum gas.

Engineering controls:

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits.

Respiratory Protection:

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown.

Protective Clothing/Equipment:

Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene Considerations:

Avoid generating high concentrations of vapours or mists. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state, colour and odour: Clear, amber, aerosolized liquid. Hydrocarbon odour.

Odour threshold: N/Av

pH: N/Av

Melting/freezing point: N/Av

Coefficient of oil/water distribution: N/Av

Specific gravity or density (water = 1): 0.87 – 0.91

Evaporation rate (n-Butyl acetate = 1): > 1

Boiling point: 56 °C (Acetone)

Vapour pressure (@ 20°C): 50-60 psig

Solubility in water: Negligible

Vapour density (Air = 1): > 1 heavier than air

% volatile (weight): N/Av

SECTION 10 - REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable under the recommended storage and handling conditions prescribed.

Polymerization: Hazardous polymerization will not occur.

Conditions to avoid: Avoid heat, sparks, direct flame and other ignition sources.

Materials to avoid: Incompatible materials (see Section 7).

Hazardous decomposition products: None known. Refer to 'Hazardous combustion products', Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION**Toxicological data:**

There is no available data for the product itself, only for the ingredients. **For more details, refer to Section 3.**

Carcinogenicity: No ingredient listed by IARC, ACGIH, NTP or OSHA as a carcinogen.

Teratogenicity, mutagenicity, other reproductive effects: N/Av

Skin sensitization: May cause sensitization with allergic contact symptoms.

Respiratory tract sensitization: N/Av

Conditions aggravated by exposure: None known

Synergistic materials: N/Av

SECTION 12 - ECOLOGICAL INFORMATION

Environmental effects: There is no available data on the product itself. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

Important environmental characteristics: N/Av

Aquatic toxicity: N/Av

SECTION 13 - WASTE DISPOSAL**Handling and storage conditions for disposal:**

Store material for disposal as indicated in Handling and Storage (Section 7). Do not puncture or incinerate empty spray cans.

Methods of disposal:

Review federal, provincial and local government requirements prior to disposal.

SECTION 14 - TRANSPORTATION INFORMATION**Transportation of Dangerous Goods (TDG) :**

TDG Classification: AEROSOL; Class 2.1; UN1950

Special case: Product can also be shipped as a LIMITED QUANTITY/CONSUMER COMMODITY according to TDG Section 1.17.

SECTION 15 - REGULATORY INFORMATION**In Canada****WHMIS information:**

Product is regulated according to the Controlled Product Regulations (CPR) in Canada.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

Hazardous Materials Identification System (HMIS):

HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0 PERSONAL PROTECTION: Section 8.

HAZARD: 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

National Fire Protection Association (NFPA):

HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0 PERSONAL PROTECTION: Section 8.

HAZARD: 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

United States OSHA information:

This product is regulated according to OSHA. This MSDS contains all the information required by OSHA.

United States TSCA information: The ingredients in this product are listed on the TSCA.

New Jersey Labeling Requirements: Ingredients to be disclosed on product labelling : Refer to Section 2.

California Proposition 65: This product may contain traces of chemicals that are known to the State of California to cause cancer or other reproductive harm.

SECTION 16 - OTHER INFORMATION

Prepared by: NSS ENTREPRISE INC. for Asalco Inc.

Telephone number: Telephone 819-876-2211 Fax 819-876-5373 Internet www.asalco.com

References:

1. Material Safety Data Sheets from manufacturer/supplier.
2. CSST, Répertoire Toxicologique, Les produits, 2009.
3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2009.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations (Transportation in U.S.A.)
DOT	Department of Transport (U.S.A.)
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
USEPA	United States Environmental Protection Agency
WHMIS	Workplace Hazardous Materials Information System

End of the MSDS