

MATERIAL SAFETY DATA SHEET

LPS 2[®] (Bulk) Revision Date: 5/14/2009

Supercedes: 9/25/2008

Section 1 – Identification

Product Name:	LPS 2 [®]
Part Number:	00222, 02128, 00205, 00255, C00222, C02128, C00205, C00255
Chemical Name:	Petroleum Distillates
Product Use:	An industrial lubricant designed to displace moisture from mechanical and electrical equipment, provide light-duty lubrication and short-term rust prevention.
Manufacturer Information:	LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA, USA 30084
TEL:	1 770-243-8800
Emergency Telephone Number:	1-800-424-9300 Chemtrec; Outside U.S.: (703) 527-3887
FAX:	1 770-243-8899
Website:	http://www.lpslabs.com

PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably will not help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, do not hesitate to call us at 1 770-243-8800.

Worker Toxicity

LPS 2[®] is an industrial chemical. It is a specialized lubricant designed to reduce friction, heat, noise, and wear between moving parts, and to loosen rusted or immovable parts and mechanisms. It contains petroleum distillates and mineral oil that can be irritating to skin. Avoid extended exposure to unprotected skin. Do not get it in your eyes (it stings), or breath the vapor (if working on hot surfaces or heated tanks). Vapors from heated LPS 2[®] can make you dizzy and even sick. For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

Flammability

LPS 2[®] is combustible having a flash point typically above 170[°]F and an auto ignition temperature over 400[°]F. Under normal use conditions flammability is not a concern, but don't apply the product onto red-hot metal surfaces or near sparks.

Disposal

LPS 2[®] in non-aerosol form is not hazardous for disposal; however, if it becomes contaminated with another substance, the resulting mixture may fall under a hazardous classification. See section 13 for more details.



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Section 2 – Hazards identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview:

Eyes:

Bulk: DANGER: Combustible. Harmful or Fatal if Swallowed.

Primary route(s) of entry: Skin and Eye contact. Inhalation.

Irritating to eyes

Potential Acute Health Effects:

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Skin: Repeated exposure may cause skin dryness or cracking.

- **Inhalation:** Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or headache.
- **Ingestion:** Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No OSHA: No ACGIH: No

Mutagenic Effects: None

Teratogenic Effects: None

Medical conditions aggravated by exposure:

Persons with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, chronic respiratory diseases, or impaired liver or kidney function should avoid exposure.

Signs and Symptoms:

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 – Compositon / Information on Ingredients				
Component	CASRN	Weight Percent		
Aliphatic Hydrocarbons	64742-47-8	70-80%		
Mineral Seal (Petroleum) Oil	64742-46-7	20-30%		



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Section 4 – First Aid Measures

- Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, lowpressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately. Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do not use ointments. Seek medical attention if irritation persists. Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If Inhalation: heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth Ingestion: to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately. Notes to Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate
- **Notes to Physician:** Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Section 5 – Fire Fighting Measures

Products of Combustion: Carbon monoxide and carbon dioxide.

Firefighting media: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto ignition or explosions.

Sensitivity to Impact: None. Sensitivity to Static Discharge: None.

Protection Clothing (Fire): Firefighters must use full bunker gear including NIOSH-approved positive pressure selfcontained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles.

Special Remarks on Explosion Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Section 6 – Accidental Release Measures				
Containment Procedures	Contain and recover spilled liquid when possible.			
Clean-Up Procedures	Small Spill and Leak:	Absorb with an inert material and dispose of properly.		
	Large Spill and Leak:	Secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non- combustible absorbent materials. Place into appropriate waste containers for later disposal.		
Evacuation Procedures	Ventilate area of leak or sp	ill. Keep unnecessary and unprotected people away.		
Special Procedures	Remove all sources of igni cleanup.	tion. Ventilate area. Wear appropriate protective equipment during		



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Section 7 – Handling and Storage

Handling: DO NOT spray into or around ignition sources. Do not allow material to come into contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Do not breathe vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store below 120°F.

Precautions to be taken in handling and storage: Store all materials in dry, well-ventilated area. Avoid breathing vapors.

Section 8 – Exposure Controls / Personal Protection

Exposure Guidelines:

Component	CASRN	OSHA TWA-PEL	OSHA STEL	ACGIH-TLV	ACGIH- STEL	NIOSH REL
Aliphatic Hydrocarbons	64742-47-8	100 ppm* 525 mg/m ³ *	Not Established	Not Established	Not Established	Not Established
Mineral Seal Oil	64742-46-7	5 mg/m ³	Not Established	5mg/m ³	Not Established	Not Established

* Supplier Recommendation

Engineering Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above.

Personal protective equipment

Eye protection	Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.
Hand protection	Normally no hand protection is required; however, if product will be sprayed for an extended period, "overspray" onto skin may occur. If so, use chemical resistant gloves (i.e., nitrile, neoprene, buna) conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.
Respiratory protection	Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e., organic vapor cartridge).
General Hygiene Considerations	Wash throughly after handling. Have eye-wash facilities immediately available.



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Section 9 – Physical and Chemical Properties

Appearance:	Liquid	Color:	Brown
Odor/Taste:	Petroleum/Cherry	Vapor Pressure:	< 0.05mmHg @ 20 °C
Solubility Description:	< 3%	Evaporation Rate:	<0.1(BuAc=1)
Boiling Point:	195°C (383°F)	Flash Point:	~79°C (175°F)
Specific Gravity (Water=1):	0.82-0.86 @ 20 °C	Flash Point Method:	Tag-Closed Cup.
Vapour Density (air=1):	4.7	Auto Ignition Temperature (°C):	>228°C (442°F)
V.O.C. Content:	0 g/L per CARB definition	Partition Coefficient (octanol/water):	< 1
Flammable limits (estimated):	LOWER: 0.6% UPPER: 7%	Viscosity:	< 7 cSt @ 25°C
pH:	Not Determined	Odor threshold	Not Determined
Melting Point	<-50°C	Volatiles:	92 - 95%
Decomposition Temperature	Not Determined		

Section 10 – Chemical Stability and Reactivity			
Chemical Stability:	Product is stable under recommended storage conditions.		
Conditions to Avoid:	Keep away from heat and ignition sources.		
Incompatibility:	Reactive or incompatible with oxidizing agents.		
Hazardous Decomposition:	These products are carbon oxides (CO, CO2)		
Hazardous Polymerization:	Will not occur.		

Section 11 – Toxicological Information

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

Ingredients	CASRN	LC-50	LD-50
Aliphatic Hydrocarbons	64742-47-8	>6.8 mg/L (Supplier Data)	>5 g/kg (Supplier Data)
Mineral Seal Oil	64742-46-7	Not established	Not established



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Section 12 – Ecological Information

Mobility:	Semi-volatile. Readily absorbed into soil.	Persistence and degradability:	Only slightly biodegradable.
Bioaccumulative potential:	No bioaccumulation potential	Other adverse effects:	See below.

Ecotoxicology:

Effect on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	Aliphatic Hydrocarbons	64742-47-8	96-hr LC ₅₀	Oncorhynchus mykiss	3200 ug/L
Acute Toxicity on Daphnia					
Bacterial inhibition		No Doto	Available		
Growth inhibition of algae		NO Data	Available		
Bioaccumulation in fish					

For the 64742-47-8 component, no toxicity has been observed in water due to extremely low water solubility. If material is spilled on soil, some potential toxic effects could occur before biodegradation could remove material.

If spilled, the 64742-46-7 constituent may kill grasses and small plants by interfering with transpiration. Spilled material may coat gill structures of fish resulting in suffocation if spilled in shallow, running water. This product may be toxic to amphibians by preventing dermal respiration. This product may also cause gastrointestinal distress to birds and mammals through ingestion. Biodegradation of this product is possible within 90 to 120 days in aerobic environments at temperatures above 21°C.

Section 13 – Disposal Considerations

Waste Status:	None.
Disposal:	Waste must be disposed of in accordance with national, regional, provincial, and local environmental control regulations.
Note:	Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.



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Section 14 – Transportation Information

Bulk versions of this product are not regulated by any mode of transportation.

Section 15 – Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: None.

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Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): None

Toxic Substances Control Act (TSCA): All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372): No individual section 313 component is present at or above 1%

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

New Jersey RTK:

Bulk: Aliphatic Hydrocarbon 64742-47-8 • Mineral Seal Oil 64742-46-7 • Proprietary NJTSRN 800959-5152P • Proprietary NJTSRN 800959-5153P • Alkyl Acid Phosphate 68307-94-8

California: This product does <u>not</u> contain chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

California and OTC States: This product conforms to consumer regulations.

International Regulations

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System (WHMIS):

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

WHMIS Classification: Bulk Class B3, Class D2B

Other Regulations

Montreal Protocol listed ingredients:NStockholm Convention listed ingredients:NRotterdam Convention listed ingredients:NRoHS Compliant:Y

None. None. None. Yes.



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Section 16 • Other Information

	HMIS 19	96	HMIS III		NFPA
MSDS# 10222 Responsible Name: Clea Johnson Regulatory Affairs Coordinator	Health:	1	Health:	[/]1	Flammability
	Flammability:	2	Flammability:	2	Health 1 0 Reactivity
	Reactivity	0	Physical Hazard:	0	

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Clea Johnson, Regulatory Affairs Coordinator LPS Laboratories, A division of Illinois Tool Works

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