

LPS LABORATORIES

MATERIAL SAFETY DATA SHEET

Section 1 • Chemical Product and Company Identification

Manufacturer's Name: LPS Laboratories Address: 4647 Hugh Howell Road Tucker, GA USA 30085-5052 Trade Name: LPS White Lithium

Chemical Family: Aliphatic Hydrocarbons

Telephone Number: 770-934-7800

Part Numbers: 03816

Emergency Telephone Number:

1-800-424-9300 Chemtrec; Outside U.S.: (703) 527-3887

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 won't 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, don't hesitate to call us at 800/241-8334.

Worker Toxicity

LPS WHITE LITHIUM is an industrial lubricant. It contains petroleum derived oils and solvents, so it can irritate your skin. We suggest you wear gloves and avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breathe large amounts of the vapor, (it will dry out your nasal passages and if you breathe large amounts in poorly ventilated areas it can make you dizzy and even sick). When sprayed onto chains and gears with short bursts, the product won't produce fumes in any great quantity, (don't spray LPS WHITE LITHIUM for extended periods without adequate ventilation). If you're going to perform work involving a lot of spray lubricant in a poorly ventilated area, use of a respirator or self-contained breathing equipment may be required. For more exposure and first aid information, refer to MSDS Sections 2, 3, 8 and 11.

Flammability

LPS WHITE LITHIUM uses mostly propane ("gas grill fuel") as its propellant. It is extremely flammable! Don't spray the product onto red-hot metal surfaces, don't smoke while using it, and avoid spraying near welding or grinding operations.

Disposal

LPS WHITE LITHIUM normally cannot be spilled, but if the aerosol can is dropped from several feet or crushed it may discharge its contents. A single aerosol can of LPS WHITE LITHIUM contains less than one pint of material and much of this will evaporate quickly. If a spill occurs, the two greatest concerns are flammability of the fast drying vapors and slipperiness of walking surfaces in the affected area. Notify the proper environmental and safety personnel at your company right away. Absorb spilled material with a suitable solid like sand or "kitty litter" and place into an appropriate waste container. If an aerosol can of LPS WHITE LITHIUM does not spray and has more than an inch of material inside, it will be considered a flammable hazardous waste under U.S. EPA guidelines. See section 13 for more details.

Section 2 • Composition, Information on Ingredients

Formula changes were made on May 20, 2004. All product manufactured after that date (beginning with lot # 4141) shall have the following composition:

bers 83-5 30-4	PEL-TWA	TLV			
	10 500 ppm	Not available	Not available	Not available	Not available
-52-5 15-2	20 5 mg/m ³	5 mg/m ³	Not available	Not available	10 mg/m ³ STEL
4-1 10-2	20 750 ppm	750 ppm	Not available	10.7 ml/kg	1000 ppm STEL
-85-7 20-3	30 1000 ppm	1000 ppm	Not available	Not available	Not available
5	64-1 10-2 6-85-7 20-3	64-1 10-20 750 ppm 5-85-7 20-30 1000 ppm	2-52-5 15-20 5 mg/m ³ 5 mg/m ³ 54-1 10-20 750 ppm 750 ppm	2-52-5 15-20 5 mg/m ³ 5 mg/m ³ Not available 54-1 10-20 750 ppm 750 ppm Not available 5-85-7 20-30 1000 ppm 1000 ppm Not available	2-52-515-205 mg/m³5 mg/m³Not availableNot available64-110-20750 ppm750 ppmNot available10.7 ml/kg available6-85-720-301000 ppm1000 ppmNot availableNot available available

	Section 3 • Hazards Identification				
Physical State and Appearance:	White viscous liquid with mild solvent odor that dries to greasy film.				
Emergency Overview:	DANGER				
	Eye Irritant. Vapor Harmful. Contents Under Pressure. Harmful or Fatal if				
	Swallowed.				
Primary route(s) of entry:	Absorbed through skin. Eye contact. Inhalation.				
Potential Acute Health Effects:					
Eyes:	Irritating to eyes.				
Skin:	Repeated exposure may cause skin dryness or cracking. High vapor concentrations can cause headaches, dizziness, drowsiness, and				
Inhalation:					
	nausea, and may lead to unconsciousness.				
Ingestion:	Harmful if swallowed. Aspiration hazard if swallowed – can enter lungs and				
6	cause damage.				
Potential Chronic Health Effects:	Carcinogenic Effects: NTP: No IARC: No OSHA: No				
	Mutagenic Effects: None				
	Teratogenic Effects: None				

Medical conditions aggravated by exposure: Previous liver, kidney, respiratory and central nervous system conditions.

Section 4 • First Aid Measures

Eyes:	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation occurs.
Skin:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation:	If inhaled in significant amounts, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Section 5 • Fire Fighting Measures

Flash point: Flammable limits: Autoignition Temperature: Products of Combustion: Firefighting media:	Propellant is flammable below room temperature. LOWER: 1.8%. UPPER: 9.5% Not available Thermal decomposition will yield carbon dioxide and carbon monoxide. Use water spray or fog to cool exposed equipment and containers. Do not breathe smoke or vapors.				
Protection Clothing (Fire): Sensitivity to Impact: Special Remarks on Explosion Hazards:	Use self-contained breathing apparatus. None Sensitivity to Static Discharge: None Intense heat created by fire will cause aerosols to burst. Flammable vapors that are heavier than air may accumulate in low areas and spread along the ground away from handling site.				

Cmall Call an			6 • Accidental Rel		viete weste dispessel		
				pilled material in an approp			
Large Spill and Leak: Ventilate area by opening windows and doors. Block the path of any flowing material using soil, gravel, or other readily available material. Absorb with DRY earth, sand or other non-combustible							
	materia		y avallable material. P	usond with Divir earth, sar			
		Sect	tion 7 • Handling a	nd Storage			
Handling: Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with							
	water. Use only with adequate ventilation. Avoid breathing vapors or spray mists. Keep away from he						
2101000	sparks and flam		ventileted erec. Avei	d all acurace of ignition (or	ork or floma) Store balay		
storage:	torage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store bel 120°F.						
		Section 8 • Ex	xposure Controls,	Personal Protection			
Engineering C	Controls:			r engineering controls to ke			
		concentration	s of vapors below the	ir respective occupational	exposure limits.		
Personal Prote							
	Eyes:	Safety glasse					
	Respiratory :		ate respirator if ventilation is inadequate. oves. es. Boots. Gloves. Organic vapor phase respirator or self-contained				
	Hands:	Impervious glo					
Dereenel Dret	antion in Coop	Coloob goggle	De Beete Claves Or	zanja vanar nhaaa raanirat	or or calf contained		
	ection in Case				or or self-contained		
			es. Boots. Gloves. Org aratus (for areas with		or or self-contained		
		breathing app		poor ventilation).	or or self-contained		
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of a Large Spi		breathing app Section 9 Ce: White	• Physical and Che	poor ventilation). emical Properties Vapor pressure:	40 – 50 psia		
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of a Large Spi Physical State Volatility: Evaporation ra Boiling/Conde VOC: Odor Thresho Solubility in w	and Appearance ate: ensation point: old: vater: Reactivity: y with Various S composition pro	Substances:	• Physical and Che • Physical and Che • viscous liquid orms greasy film. (v/v) thyl ether=1) C (158°F) vailable. • on 10 • Stability ar The product is stat Concentrated oxyg	poor ventilation). emical Properties Vapor pressure: Vapor density: Odor: Specific gravity: Coefficient of Oil/W Distribution: d Reactivity	40 – 50 psia Approx. 3.0 Mild, mineral oil 0.78-0.80 (Water=1) /ater <1		
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For Petroleum Derived Components (minimum 95% of total composition):

The petroleum derived materials in this product are mild to moderate eye irritants and skin and respiratory tract irritants. Based upon laboratory animal studies of some of the components, repeated direct application to the skin can produce defatting, dermatitis, kidney damage, and changes in blood-forming capacity. None of the components of this blended product have been shown to be mutagenic. The petroleum base oil used in this product contains fractions that may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual report nor have they been classified by the International Agency for Research on Cancer (IARC) as : carcinogenic to humans, probably carcinogenic to humans or possibly carcinogenic to humans.

Section 12 • Ecological Information

For Petroleum Derived Components (minimum 95% of total composition):

Petroleum derived components of this product are potentially toxic to freshwater and saltwater ecosystems. These will normally float on water with their lighter components evaporating rapidly. In stagnant or slow-flowing waterways, petroleum distillate layers can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in a small waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life and water birds.

Section 13 • Disposal Considerations

Waste Status: This material has the RCRA characteristic of ignitability and if discarded in its purchased form would have the hazardous waste number D001.

Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Do not dump into sewers, on ground, or into a body of water. The preferred disposal options include sending the material to a licensed, permitted recycler, reclaimer, or incinerator.

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.

Mode	Shipping Name	Hazard Class	UN Number	Label	Packing Group	Emergency Response Guide	Ocean Emergency Schedule
DOT Ground	Consumer Commodity	ORM-D	1950	ORM-D (already on box)	N/A	NAERG p. 126	NA
IATA (U.S.)	Consumer Commodity	9	8000	Miscellaneous	N/A	N/A	NA
IATA (Intl.)	AEROSOLS, flammable	2.1	1950	Flammable gas	N/A	N/A	NA
IMDG (reg.):	Aerosol	2.1	1950	Flammable gas	N/A	N/A	EmS 2-13
IMDG (special.):	Dangerous Goods in Limited Quantities of Class 2	N/A	1950	N/A	N/A	N/A	EmS 2-13

Section 14 • Transportation Information

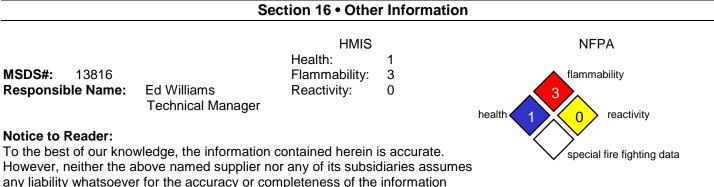
Section 15 • Regulatory Information

HCS Classification: U.S. Federal Regulations: Class: Target organ effects.

TSCA 8(b) inventory: All of the ingredients are listed on the TSCA inventory or are exempt.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 370): 5000 lbs. SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370): Acute Pressure

SARA Title III Section 313: n-hexane CAS # 110-54-3 (less than 1%)



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

May 20, 2004 Ed Williams, Technical Manager LPS Laboratories A division of Illinois Tool Works

guarantee that these are the only hazards that exist.

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