

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 Red & Redi

Chemical Family: Aliphatic Hydrocarbons

Telephone Number: 770-934-7800

Part Numbers: 05816

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 RED & REDI 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 RED & REDI 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 RED & RED! 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 RED & REDI 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 RED & REDI 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 RED & REDI 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 18, 2004. All product manufactured after that date (beginning with lot # 4140) shall have the following composition:

Ingredients	CAS Numbers	%w/w	OSHA PEL-TWA	ACGIH - TLV	LC-50	LD-50	Other Limits
lsohexane	107-83-5	40-50	500 ppm	Not available	Not available	Not available	Not available
Petroleum Oil	64742-52-5	20-30	5 mg/m ³	5 mg/m ³	Not available	Not available	10 mg/m ³ STEL
Isobutane / Propane Propellant	68476-86-8	20-30	1000 ppm	1000 ppm	Not available	Not available	Not available
Aliphatic Hydrocarbon	64742-47-8	3-5	500 ppm	100 ppm	21,400 mg/m ³ for 4 hrs. (rat)	34,600mg/kg (rat)	LD-50: 15,400mg/kg (rabbit – dermal)

The above components are hazardous as defined in 29 CFR 1910.1200.

	Section 3 • Hazards Identification					
Physical State and Appearance: Emergency Overview:	Red viscous liquid with mild solvent odor that dries to greasy film. 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. Repeated exposure may cause skin dryness or cracking.					
Skin:						
Inhalation:	High vapor concentrations can cause headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness.					
Ingestion:	Harmful if swallowed. Aspiration hazard if swallowed – can enter lungs and 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:	Propellant is flammable below room temperature.					
Flammable limits: Autoignition Temperature:	LOWER: 1.8% UPPER: 9.5% Not available					
Products of Combustion:	Thermal decomposition will yield carbon dioxide and carbon monoxide.					
Firefighting media:	Use water spray or fog to cool exposed equipment and containers. Do not breathe smoke					
	or vapors.					
Protection Clothing (Fire):	Use self-contained breathing apparatus.					
Sensitivity to Impact: Special Remarks on	None Sensitivity to Static Discharge: None					

			6 • Accidental Rel						
Small Spill and Leak: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Large Spill and Leak: Ventilate area by opening windows and doors. Block the path of any flowing material using soil									
Large Spill and Leak: Ventilate area by opening windows and doors. Block the path of any flowing material using gravel, or other readily available material. Absorb with DRY earth, sand or other non-com									
	gravei, materia	DSOLD WILL DRT Earth, Sal	r earm, sand or other non-compustible						
	materia		ion 7 • Handling a	nd Storage					
Handling: Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap									
water. Use only with adequate ventilation. Avoid breathing vapors or spray mists. Kee									
	sparks and flan								
	ye: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store belo 120°F.								
		Section 8 • Ex	posure Controls,	Personal Protection					
Engineering Co	ontrols:			engineering controls to ke					
		concentrations	rations of vapors below their respective occupational exposure limits.						
Personal Prote		0.6.6							
	Eyes: Beenireten/	Safety glasses	glasses. propriate respirator if ventilation is inadequate. ious gloves. goggles. Boots. Gloves. Organic vapor phase respirator or self-contained						
	Respiratory : Hands:								
Personal Prote									
of a Large Spill			apparatus (for areas with poor ventilation).						
		broading appe		poor vormaaorry.					
		Section 9 •	Physical and Che	mical Properties					
Physical State	and Appearan	ce: Red vi	iscous liquid	Vapor pressure:	40 – 50 psia				
-	and Appearan	that fo	rms greasy film.	Vapor pressure: Vapor density:	40 – 50 psia N.E.				
volatility:		that fo 65% (v	rms greasy film. v/v)		,				
Volatility: Evaporation rat	te:	that fo 65% (ע <1 (eth	rms greasy film. v/v) hyl ether≂1)	Vapor density: Odor:	N.E. Mild, mineral oil				
Volatility: Evaporation rat Boiling/Conder	te:	that fo 65% (v <1 (eth 70.2°C	rms greasy film. v/v) hyl ether≂1) C (158°F)	Vapor density: Odor: Specific gravity:	N.E. Mild, mineral oil 0.78-0.80 (Water=1)				
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Volatility: Evaporation rad Boiling/Conder VOC: Odor Threshold Solubility in wa	te: nsation point: d: nter: eactivity:	that fo 65% (v <1 (ett 70.2°C Aeroso Not av Nil	rms greasy film. v/v) hyl ether=1) C (158°F) ol: 35%, ⁄ailable. on 10 • Stability an The product is stab	Vapor density: Odor: Specific gravity: Coefficient of Oil/W Distribution: d Reactivity	N.E. Mild, mineral oil 0.78-0.80 (Water=1) /ater <1				
Volatility: Evaporation rad Boiling/Conder VOC: Odor Threshold Solubility in wa Stability and Re ncompatibility	te: nsation point: d: nter: eactivity: with Various S	that fo 65% (v <1 (ett 70.2°C Aeroso Not av Nil Sectio	rms greasy film. v/v) hyl ether=1) C (158°F) ol: 35%, vailable. on 10 • Stability an The product is stab Concentrated oxyg	Vapor density: Odor: Specific gravity: Coefficient of Oil/W Distribution: d Reactivity le. en and strong oxidizing ag	N.E. Mild, mineral oil 0.78-0.80 (Water=1) /ater <1				
Volatility: Evaporation rad Boiling/Conder VOC: Odor Threshold Solubility in wa Stability and Re Incompatibility Hazardous dec	te: hsation point: d: hter: eactivity: with Various S omposition pro	that fo 65% (v <1 (ett 70.2°C Aeroso Not av Nil Sectio	rms greasy film. v/v) hyl ether≂1) C (158°F) ol: 35%, railable. on 10 • Stability an The product is stab Concentrated oxyg Carbon monoxide a	Vapor density: Odor: Specific gravity: Coefficient of Oil/W Distribution: d Reactivity	N.E. Mild, mineral oil 0.78-0.80 (Water=1) /ater <1				
Physical State Volatility: Evaporation rat Boiling/Conder VOC: Odor Threshold Solubility in wa Stability and Re Incompatibility Hazardous dec Hazardous poly	te: hsation point: d: hter: eactivity: with Various S omposition pro	that fo 65% (v <1 (ett 70.2°C Aeroso Not av Nil Sectio	rms greasy film. v/v) hyl ether=1) C (158°F) ol: 35%, vailable. on 10 • Stability an The product is stab Concentrated oxyg	Vapor density: Odor: Specific gravity: Coefficient of Oil/W Distribution: d Reactivity le. en and strong oxidizing ag	N.E. Mild, mineral oil 0.78-0.80 (Water=1) /ater <1				

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:
 Class: Target organ effects.

 U.S. Federal Regulations:
 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

 Acute Pressure

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

Section 16 • Other Information

		HMIS		NFPA
		Health:	1	
MSDS#: 15816		Flammability:	3	flammability
Responsible Name:	Ed Williams Technical Manager	Reactivity:	0	health 1 0 reactivity
Notice to Reader: To the best of our know	wledge, the information	contained herein	is accurate.	special fire fighting data
However, neither the a	above named supplier no	or any or its subsi	diaries 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.

May 18, 2004 Ed Williams, Technical Manager LPS Laboratories A division of Illinois Tool Works

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