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

Telephone Number: 770-934-7800

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

Trade Name:
LPS Red & Redi

Chemical Family: Aliphatic Hydrocarbons

Part Numbers:
05816

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 & REDI 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
Isohexane	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: Red 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.

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: LOWER: 1.8% UPPER: 9.5%

Autoignition Temperature: 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: None **Sensitivity to Static Discharge**: None

Special Remarks on

Explosion Hazards: 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.

Section 6 • Accidental Release Measures

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, gravel, or other readily available material. Absorb with DRY earth, sand or other non-combustible material.

Section 7 • Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing vapors or spray mists. Keep away from heat, sparks and flame.
Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store below 120°F.

Section 8 • Exposure Controls, Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
Personal Protection:
Eyes: Safety glasses.
Respiratory : Use appropriate respirator if ventilation is inadequate.
Hands: Impervious gloves.
Personal Protection in Case of a Large Spill: Splash goggles. Boots. Gloves. Organic vapor phase respirator or self-contained breathing apparatus (for areas with poor ventilation).

Section 9 • Physical and Chemical Properties

Physical State and Appearance:	Red viscous liquid that forms greasy film.	**Vapor pressure:**	40 – 50 psia
		Vapor density:	N.E.
Volatility:	65% (v/v)	**Odor:**	Mild, mineral oil
Evaporation rate:	<1 (ethyl ether=1)		
Boiling/Condensation point:	70.2°C (158°F)	**Specific gravity:**	0.78-0.80 (Water=1)
VOC:	Aerosol: 35%,	**Coefficient of Oil/Water**	
Odor Threshold:	Not available.	**Distribution:**	<1
Solubility in water:	Nil		

Section 10 • Stability and Reactivity

Stability and Reactivity: The product is stable.
Incompatibility with Various Substances: Concentrated oxygen and strong oxidizing agents
Hazardous decomposition products: Carbon monoxide and carbon dioxide.
Hazardous polymerization: Will not occur.

Section 11 • Toxicological Information

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.

Section 14 • Transportation Information

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

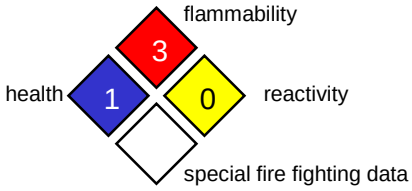
Section 15 • Regulatory Information

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

Section 16 • Other Information

	HMIS	NFPA
Health:	1	
Flammability:	3	
Reactivity:	0	



MSDS#: 15816
Responsible Name: Ed Williams
Technical Manager

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.

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

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