



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	LPS 1® Greaseless Firearm Lubricant and Cleaner	
Version #	02	
Issue date	10-03-2014	
Revision date	02-09-2015	
Supersedes date	10-03-2014	
CAS #	Mixture	
Part Number	C30144	
Product use	Specially formulated to penetrate minute crevices, displace moisture, and leave behind a thin, dry lubricating film. It removes carbon, while lubricating precision instruments, and protects firearms from rust and corrosion.	
Manufacturer information	ITW Pro Brands 4647 Hugh Howell Rd Tucker, Georgia 30084 United States www.lpslabs.com 1-800-241-8334/ 770-243-8800 Chemtrec 1-800-424-9300	
Supplier	Not available.	

2. Hazards Identification

Emergency overview	WARNING Combustible liquid. May be ignited by heat, sparks or flames. Causes skin irritation. May cause an allergic skin reaction. May be irritating to eyes. May cause drowsiness and dizziness.
Potential health effects	
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Eyes	Avoid contact with eyes. May cause eye irritation.
Skin	Avoid contact with the skin. Causes skin irritation. May cause sensitization by skin contact.
Inhalation	Avoid breathing dust/fume/gas/mist/vapors/spray. Prolonged inhalation may be harmful.
Ingestion	Do not ingest. Irritating to mouth, throat, and stomach.
Potential environmental effects	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Distillates Petroleum, Hydrotreated Light	64742-47-8	70 - 80
Distillates Petroleum Hydrotreated Med	64742-46-7	15 - 25
Sorbitan trioleate	26266-58-0	1 - 5
Calcium Sulfonate	61789-86-4	0.1 - 1
Other components below reportable levels		2.73

4. First Aid Measures

First aid procedures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Notes to physician	Symptoms may be delayed.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Combustible by WHMIS criteria. Heat may cause the containers to explode.
Extinguishing media	
Suitable extinguishing media	Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Protection of firefighters	
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire fighting equipment/instructions	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
Explosion data	
Sensitivity to static discharge	None known.
Sensitivity to mechanical impact	None known.
Hazardous combustion products	May include oxides of carbon.

6. Accidental Release Measures

Personal precautions	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Extinguish all flames in the vicinity. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Should not be released into the environment. Never return spills to original containers for re-use. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not use in areas without adequate ventilation. Wear personal protective equipment. Wash thoroughly after handling. Avoid release to the environment.
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Storage

Do not handle or store near an open flame, heat or other sources of ignition. Keep at temperature not exceeding 49 °C. Store in a closed container away from incompatible materials. Store in a well-ventilated place. Keep container dry. Keep out of the reach of children. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection**Occupational exposure limits****ACGIH****Components****Type****Value****Form**

Distillates Petroleum,
Hydrotreated Light (CAS
64742-47-8)

TWA

5 mg/m³

Oil mist

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**Components****Type****Value****Form**

Distillates Petroleum,
Hydrotreated Light (CAS
64742-47-8)

TWA

200 mg/m³

Non-aerosol.

U.S. - OSHA**Components****Type****Value****Form**

Distillates Petroleum,
Hydrotreated Light (CAS
64742-47-8)

PEL

5 mg/m³

Oil mist

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines**Canada - British Columbia OELs: Skin designation**

Distillates Petroleum, Hydrotreated Light (CAS
64742-47-8)

Can be absorbed through the skin.

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye/face protection**

Not normally needed. Avoid contact with eyes.

Skin protection

Avoid contact with the skin. Wear appropriate chemical resistant clothing.

Respiratory protection

Respiratory protection not required. Do not breathe dust/fume/gas/mist/vapors/spray.

Hand protection

Chemical resistant gloves are recommended.

9. Physical & Chemical Properties**Appearance**

Liquid.

Physical state

Liquid.

Form

Liquid saturated on wipe.

Color

Amber.

Odor

Characteristic.

Odor threshold

Not available.

pH

Not applicable

Vapor pressure

< 0.05 mm Hg @ 20°C

Vapor density

> 1 (air = 1)

Boiling point

415.4 °F (213 °C)

Melting point/Freezing point

< -58 °F (< -50 °C)

Solubility (water)

Not soluble

Specific gravity

0.79 - 0.81 @ 20°C

Relative density

0.79 - 0.81 @ 20°C

Flash point

174.2 °F (79.0 °C) Tag Closed Cup (dispensed liquid)

Flammability limits in air, upper, % by volume	7 %
Flammability limits in air, lower, % by volume	0.6 %
Auto-ignition temperature	> 442.4 °F (> 228 °C)
VOC	0.4 % per US State & Federal Consumer Product Regulations
Evaporation rate	< 0.1 (BuAc = 1)
Viscosity	< 3.8 cSt @ 25°C
Percent volatile	95 - 96 %
Partition coefficient (n-octanol/water)	< 1
Other data	
Decomposition temperature	Not established
Flammability (solid, gas)	Not applicable.
Heat of combustion	Not established

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Oxidizing agents.
Hazardous decomposition products	Carbon oxides.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Calcium Sulfonate (CAS 61789-86-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
	Rat	> 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	> 1.9 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	7640 mg/m ³ , 4 Hours 1.72 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg > 2000 mg/kg, 24 Hours

Components	Species	Test Results
<i>Inhalation</i>		
LC50	Cat	> 6.4 mg/l, 6 Hours
	Rat	> 7.5 mg/l, 6 Hours
		> 4.3 mg/l, 4 Hours
		> 0.1 mg/l, 8 Hours
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Acute effects	Narcotic effects. May cause an allergic skin reaction.	
Sensitization	Not classified.	
Local effects	Irritating to eyes. Irritating to skin. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
Chronic effects	Prolonged inhalation may be harmful.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.	
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Reproductive effects	This product is not expected to cause reproductive or developmental effects.	
Teratogenicity	Not available.	
Symptoms and target organs	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Exposure may cause temporary irritation, redness, or discomfort. Defatting of the skin. Rash. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Decrease in motor functions. Behavioral changes.	
Synergistic materials	Not available.	

12. Ecological Information

Ecotoxicological data

Components	Species	Test Results
Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)		
Aquatic		
Fish	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Ecotoxicity	Harmful to aquatic life with long lasting effects.	
Environmental effects	Harmful to aquatic life with long lasting effects.	
Aquatic toxicity	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.	
Persistence and degradability	Not inherently biodegradable.	
Partition coefficient		
LPS 1® Greaseless Firearm Lubricant and Cleaner	< 1	
Other adverse effects	None known.	

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

Canadian regulations

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

WHMIS status

Controlled

WHMIS classification

B3 - Combustible Liquids
D2B - Other Toxic Effects-TOXIC

WHMIS labeling



International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Disclaimer

LPS Laboratories cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by

Not available.

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Alternate Trade Names
GHS: Classification