



SAFETY DATA SHEET

1. Identification

Product identifier LPS 1® Greaseless Firearm Lubricant and Cleaner

Other means of identification

Part Number 00144

Recommended use of the chemical and restrictions on use

Recommended 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.

Restrictions on use Not available.

Details of manufacturer or importer

Manufacturer

Supplier Name MRO Chem Pty Ltd.
Address Level 19, 644 Chapel Street
 South Yarra, Victoria 3141, Australia
 Tel: +03 9823 6273
 +04 3448 1129

In Case of Emergency

Manufacturer

Company name LPS Laboratories, a division of Illinois Tool Works, Inc.
Address 4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)
Website <http://www.lpslabs.com>
E-mail sds@lpslabs.com

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards	Flammable liquids	Category 4
Health hazards	Skin corrosion/irritation	Category 2
	Sensitization, skin	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3

Label elements, including precautionary statements

Hazard symbol(s)



Exclamation mark

Signal word

Warning

Hazard statement(s)

Combustible liquid. Causes skin irritation. May cause an allergic skin reaction. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face protection.

Response

In case of fire: Use appropriate media for extinction. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: 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.

Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
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

4. First-aid measures

Description of necessary first aid measures

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 contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
Symptoms caused by exposure	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Defatting of the skin. Rash. Dermatitis.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. 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.

Hazchem code

Not available.

General fire hazards

Combustible liquid.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel 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 SDS.

For emergency responders Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls and personal protection

Control parameters Follow standard monitoring procedures.

Occupational exposure limits

ACGIH Components	Type	Value	Form
Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m ³	Oil mist
Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)			
Components	Type	Value	Form
Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)	TWA	140 mg/m ³	Vapor and aerosol.
		20 ppm	Vapor and aerosol.

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

Appropriate 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.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection Not normally needed. Avoid contact with eyes.

Skin protection

Hand protection Chemical resistant gloves are recommended.

Other 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.

Thermal hazards Not applicable.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid.

Physical state Liquid.

Form Liquid saturated on wipe.

Color	Amber.
Odor	Characteristic.
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	< -58 °F (< -50 °C)
Initial boiling point and boiling range	415.4 °F (213 °C)
Flash point	174.2 °F (79.0 °C) Tag Closed Cup (dispensed liquid)
Evaporation rate	< 0.1 (BuAc = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.6 %
Flammability limit - upper (%)	7 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.05 mm Hg @ 20°C
Vapor density	> 1 (air = 1)
Relative density	0.79 - 0.81 @ 20°C
Solubility(ies)	
Solubility (water)	Not soluble
Partition coefficient (n-octanol/water)	< 1
Auto-ignition temperature	> 442.4 °F (> 228 °C)
Decomposition temperature	Not established
Viscosity	< 3.8 cSt @ 25°C
Other physical and chemical parameters	
Heat of combustion	Not established
Percent volatile	95 - 96 %
VOC (Weight %)	0.4 % per US State & Federal Consumer Product Regulations

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to exposure	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.

Acute toxicity Narcotic effects. May cause an allergic skin reaction.

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	10000 - 20000 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
Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg > 2000 mg/kg, 24 Hours
<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
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Narcotic effects.	
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.	
Aspiration hazard	Not likely, due to the form of the product.	
Chronic effects	Prolonged inhalation may be harmful.	

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
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Distillates Petroleum, Hydrotreated Light (CAS 64742-47-8)

Aquatic

Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
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Persistence and degradability Not inherently biodegradable.

Bioaccumulative potential

Partition coefficient

n-octanol / water (log Kow)

LPS 1® Greaseless Firearm Lubricant and Cleaner < 1

Mobility in soil No data available for this product.

Other adverse effects None known.

13. Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste 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

ADG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Safety, health and environmental regulations

National regulations This Material Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.)

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)Distillates Petroleum Hydrotreated Med (CAS
64742-46-7)1000 - 9999 TONNES See the regulation for additional
information.Distillates Petroleum, Hydrotreated Light (CAS
64742-47-8)100000 - 999999 TONNES See the regulation for additional
information.**Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories**Country(s) or region**

Australia

Inventory name

Australian Inventory of Chemical Substances (AICS)

On inventory (yes/no)*

Yes

Canada

Domestic Substances List (DSL)

Yes

Canada

Non-Domestic Substances List (NDSL)

No

Country(s) or region	Inventory name	On inventory (yes/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

Issue date

10-03-2014

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.