

1. Identification

Product identifier	LPS® LST (Aerosol)
Other means of identification	
Part Number	01916, C01916
Recommended use	An industrial penetrant designed to penetrate rust and loosen seized bolts and other equipment damaged by corrosion.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	ITW Pro Brands
Address	4647 Hugh Howell Rd. Tucker, GA 30084
Country	(U.S.A.) Tel: +1 770-243-8800
In Case of Emergency	1-800-424-9300 1-703-527-3887
Website	www.lpslabs.com
E-mail	lpssds@itwprobrands.com
Supplier	ITW Permatex Canada 1-35 Brownridge Road Halton Hills, ON, L7G 0C6 Canada 1-800-241-8334

2. Hazard identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Compressed gas
Health hazards	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways.
Precautionary statement	
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.
Response	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
Storage	Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	Combustible.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates Petroleum Hydrotreated Light		64742-47-8	80 - 90
Distillates Petroleum Hydrotreated Med		64742-46-7	1 - 10
Carbon Dioxide		124-38-9	1 - 5
Benzenesulfonic Acid, Mono-c16-24-alkyl Derivs., Calcium Salts		70024-69-0	0.1 - 1
Distillates (petroleum), Hydrotreated Heavy Naphthenic		64742-52-5	0.41

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	No specific first aid measures noted.
Ingestion	Not likely, due to the form of the product.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. 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	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage.

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

Components

Components	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m3	Oil mist

US. ACGIH Threshold Limit Values

Components

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3 5000 ppm

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

Components

Components	Type	Value	Form
Carbon Dioxide (CAS 124-38-9)	STEL	15000 ppm	
	TWA	5000 ppm	
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	200 mg/m3	Non-aerosol.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3
		5000 ppm

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	15 minute	30000 ppm
	8 hour	5000 ppm

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.

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, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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**

Physical state Gas.

Form Aerosol. Compressed gas.

Color Clear.

Odor Vanilla.

Odor threshold Not available.

pH Not applicable

Melting point/freezing point Not established

Initial boiling point and boiling range 383 °F (195 °C)

Flash point 174.2 °F (79.0 °C) Tag Closed Cup

Evaporation rate < 0.7 BuAc

Flammability (solid, gas) Flammable gas.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure < 0.1 mm Hg @ 20°C

Vapor density 4.7

Relative density Not available.

Solubility(ies)

Solubility (water) < 0.1 %

Partition coefficient (n-octanol/water) > 1

Auto-ignition temperature Not established

Decomposition temperature Not established

Viscosity Not established

Other information

Explosive properties Not explosive.

Heat of combustion > 30 kJ/g

Oxidizing properties Not oxidizing.

Percent volatile 96 - 99 %

Specific gravity 0.79 - 0.81 @ 20°C

VOC 0 % per US State and 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 Hazardous polymerization does not occur.

Conditions to avoid Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Carbon oxides.

11. Toxicological information**Information on likely routes of exposure**

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
Benzenesulfonic Acid, Mono-c16-24-alkyl Derivs., Calcium Salts (CAS 70024-69-0)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours

Components	Species	Test Results
Oral LD50	Rat	> 2000 mg/kg
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)		
Acute		
Dermal LD50	Rabbit	> 2000 mg/kg
Oral LD50	Rat	> 2000 mg/kg
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
Acute		
Dermal LD50	Rabbit	> 2000 mg/kg
Inhalation <i>Vapor</i> LC50	Rat	> 4.5 mg/l, 4 Hours > 0.1 mg/l, 8 Hours
Oral LD50	Rat	> 5000 mg/kg
Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)		
Acute		
Dermal LD50	Rabbit	> 2000 mg/kg, 24 Hours
Oral LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
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	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful.	

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

LPS® LST (Aerosol)

> 1

Mobility in soil No data available.**Other adverse effects** None known.**13. Disposal considerations****Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.**Local disposal regulations** Dispose in accordance with all applicable regulations.**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
D003: Waste Reactive material**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** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.**14. Transport information****TDG****UN number** UN1950
UN proper shipping name AEROSOLS, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards No
Special precautions for user Not available.**IATA****UN number** UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards No
ERG Code 10L
Special precautions for user Not available.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.**IMDG****UN number** UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es)
Class 2
Subsidiary risk -
Packing group Not available.
Environmental hazards
Marine pollutant No
EmS F-D, S-U
Special precautions for user Not available.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

15. Regulatory information**Canadian regulations**

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

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Carbon Dioxide (CAS 124-38-9)

Precursor Control Regulations

Not regulated.

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Carbon Dioxide (CAS 124-38-9)

Listed.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
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 08-03-2016

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Version # 03

Disclaimer ITW Pro Brands 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.

Revision information Hazard identification: Supplemental information
Composition / Information on Ingredients: Disclosure Overrides
Composition/information on ingredients: Component information