

## 1. Identification

<b>Product identifier</b>	<b>LPS® ChainMate</b>	
<b>Other means of identification</b>		
<b>Part Number</b>	02416, C02416	
<b>Recommended use</b>	A spray lubricant designed to penetrate chains and wire ropes, displace moisture and provide long lasting lubrication under high loads and humid conditions.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	ITW Pro Brands	
<b>Address</b>	4647 Hugh Howell Rd. Tucker, GA 30084	
<b>Country</b>	(U.S.A.) Tel: +1 770-243-8800	
<b>In Case of Emergency</b>	1-800-424-9300 1-703-527-3887	
<b>Website</b>	www.lpslabs.com	
<b>E-mail</b>	lpssds@itwprobrands.com	
<b>Supplier</b>	ITW Permatex Canada 1-35 Brownridge Road Halton Hills, ON, L7G 0C6 Canada 1-800-241-8334	

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols Gases under pressure	Category 1 Liquefied gas
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger	
<b>Hazard statement</b>	Extremely flammable aerosol. Contains gas under pressure; may explode if heated.	
<b>Precautionary statement</b>		
<b>Prevention</b>	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.	
<b>Response</b>	Wash hands after handling.	
<b>Storage</b>	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.	
<b>Other hazards</b>	None known.	
<b>Supplemental information</b>	None known.	

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Residual Oils, Petroleum, Solvent Refined		64742-01-4	60 - 70
Petroleum Gases, Liquefied, Sweetened		68476-86-8	20 - 30
ACETONE		67-64-1	< 10
Distillates Petroleum Hydrotreated Light		64742-47-8	1 - 5
Petroleum Oil		64741-88-4	1 - 5

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

#### 4. First-aid measures

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

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	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. 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.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	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.
<b>Methods and materials for containment and cleaning up</b>	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. 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.
<b>Environmental precautions</b>	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. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

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	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m <sup>3</sup>	Oil mist

#### US. ACGIH Threshold Limit Values

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm

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

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	1800 mg/m <sup>3</sup>
		750 ppm
	TWA	1200 mg/m <sup>3</sup>
		500 ppm

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

Components	Type	Value	Form
ACETONE (CAS 67-64-1)	STEL	500 ppm	Non-aerosol.
	TWA	250 ppm	
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	200 mg/m <sup>3</sup>	

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

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm

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

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm

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

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	2380 mg/m <sup>3</sup>
		1000 ppm
	TWA	1190 mg/m <sup>3</sup>
		500 ppm

## Biological limit values

### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	25 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

## 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. Suitable gloves can be recommended by the glove supplier.

**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.  
**Color** Dark grey. Black.

**Odor** Slight petroleum odor.

**Odor threshold** Not established

**pH** Not applicable

**Melting point/freezing point** Not established

**Initial boiling point and boiling range** Not established

**Flash point** < -4.0 °F (< -20.0 °C) Tag Closed Cup

**Evaporation rate** Not established

**Flammability (solid, gas)** Flammable gas.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not established

**Flammability limit - upper (%)** Not established

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** 35 psi @ 75° F

**Vapor density** > 1

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** 16 % (Soluble)

<b>Partition coefficient (n-octanol/water)</b>	Not established
<b>Auto-ignition temperature</b>	Not established
<b>Decomposition temperature</b>	Not established
<b>Viscosity</b>	150 cP @ 75° F / 23.9° C
<b>Other information</b>	
<b>Density</b>	7.32
<b>Explosive properties</b>	Not explosive.
<b>Heat of combustion</b>	> 30 kJ/g
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	17 %
<b>Percent volatile temperature</b>	110 °F (43.33 °C)
<b>Specific gravity</b>	0.88 @ 20°C
<b>VOC</b>	22.33 % per US State and Federal Consumer Product Regulations

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 4.5 mg/l, 4 Hours
Mineral Oil (CAS 64742-65-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 3.9 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

Components	Species	Test Results
Petroleum Oil (CAS 64741-88-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 3.9 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
Residual Oils, Petroleum, Solvent Refined (CAS 64742-01-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>ACGIH Carcinogens</b>		
ACETONE (CAS 67-64-1)	A4 Not classifiable as a human carcinogen.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
ACETONE (CAS 67-64-1)	Not classifiable as a human carcinogen.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not likely, due to the form of the product.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	
<b>Further information</b>	None known.	

## 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
ACETONE (CAS 67-64-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)

**Persistence and degradability** Not inherently biodegradable.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

LPS® ChainMate

&gt; 1

ACETONE

-0.24

**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.**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, flammable  
**Transport hazard class(es)**  
**Class** 2.1  
**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**

**Canada. Excluded VOCs. Guidelines for Volatile Organic Compounds in Consumer Products. CEPA 1999. Environment Canada, as amended**

ACETONE (CAS 67-64-1)

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)**

ACETONE (CAS 67-64-1)

**Precursor Control Regulations**

ACETONE (CAS 67-64-1)

Class B

**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	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
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)	No
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



Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	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** 11-02-2016

**Version #** 01

**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** Product and Company Identification: Product Uses  
Composition / Information on Ingredients: Ingredients  
Physical & Chemical Properties: Multiple Properties  
Ecological Information: Ecotox Property Data  
Transport Information: Material Transportation Information  
Regulatory Information: United States  
HazReg Data: North America  
GHS: Classification