



SAFETY DATA SHEET

165-020

1. Identification

Product Identifier LPS® ChainMate
 Other means of identification
 Part Number 02416, C02416
 Recommended use A spray lubricant designed to penetrate chains and wire ropes, displace moisture and provide long lasting lubrication under high loads and humid conditions.
 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
 1-800-424-9300
 1-703-527-3887
 Website www.lpslabs.com
 E-mail lpseds@itwprobrands.com
 Supplier ITW Permalex Canada
 1-35 Brownridge Road
 Halton Hills, ON, L7G 0C8
 Canada
 1-800-241-8334

C02416

2. Hazard(s) Identification

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



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

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|---------|
| Residual Oil, Petroleum, Solvent Refined | | 64742-01-4 | 80 - 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

| | |
|--|--|
| 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 | Direct contact with eyes may cause temporary irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. |
| 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. Foam. Dry chemical powder. 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. 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. 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. |
| 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. 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. 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 Hydroreated Light (CAS 64742-47-8) | TWA | 5 mg/m3 | 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/m3 | |
| | | 750 ppm | |
| | TWA | 1200 mg/m3 | |
| | | 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 | |
| | TWA | 250 ppm | |
| Distillates Petroleum Hydroreated Light (CAS 64742-47-8) | TWA | 200 mg/m3 | Non-aerosol. |
| | | | |
| 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/m3 | |
| | | 1000 ppm | |
| | TWA | 1190 mg/m3 | |
| | | 500 ppm | |

Biological limit values**ACGIH Biological Exposure Indices**

| Component | 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 Hydroreated 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) |

Partition coefficient (n-octanol/water) Not established
 Auto-ignition temperature Not established
 Decomposition temperature Not established
 Viscosity 150 cP @ 75° F / 23.9° C

Other Information

Density 7.32
 Explosive properties Not explosive.
 Heat of combustion > 30 kJ/g
 Oxidizing properties Not oxidizing.
 Percent volatile 17 %
 Percent volatile temperature 110 °F (43.33 °C)
 Specific gravity 0.88 @ 20°C
 VOC 22.33 % 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 Acids. 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 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 Hydrocarbon Light (CAS 64742-47-8) | | |
| Acute | | |
| Dermal LD50 | Rabbit | > 2000 mg/kg |
| Inhalation Vapor LC50 | Rat | > 4.5 mg/l, 4 Hours |
| Mineral Oil (CAS 64742-85-0) | | |
| Acute | | |
| Dermal LD50 | Rabbit | > 2000 mg/kg |
| Inhalation LC50 | Rat | > 3.9 mg/l, 4 Hours |
| Oral LD50 | Rat | > 2000 mg/kg |

| Components | Species | Test Results |
|---|--|---------------------|
| Petroleum Oil (CAS 64741-88-4) | | |
| <u>Acute</u> | | |
| Dermal LD50 | Rabbit | > 2000 mg/kg |
| Inhalation LC50 | Rat | > 3.9 mg/l, 4 Hours |
| Oral LD50 | Rat | > 2000 mg/kg |
| Residual Oils, Petroleum, Solvent Refined (CAS 64742-01-4) | | |
| <u>Acute</u> | | |
| Dermal LD50 | Rabbit | > 2000 mg/kg |
| Oral LD50 | Rat | > 2000 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. | |
| ACGIH Carcinogens | | |
| ACETONE (CAS 67-64-1) | A4 Not classifiable as a human carcinogen. | |
| Canada - Manitoba OELs: carcinogenicity | | |
| ACETONE (CAS 67-64-1) | Not classifiable as a human carcinogen. | |
| 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 | Not likely, due to the form of the product. | |
| Chronic effects | Prolonged inhalation may be harmful. | |
| Further information | 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) | | |
| <u>Aquatic</u> | | |
| Crustacea | EC50 | Water flea (Daphnia magna) 10294 - 17704 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout, donaldson trout (Oncorhynchus mykiss) 4740 - 6330 mg/l, 96 hours |
| Distillates Petroleum Hydrotreated Light (CAS 64742-47-8) | | |
| <u>Aquatic</u> | | |
| Fish | LC50 | Rainbow trout, donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours |
| Persistence and degradability | Not inherently biodegradable. | |
| Bioaccumulative potential | | |

Partition coefficient n-octanol / water (log Kow)

LPS® ChainMate

> 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.

MDG

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

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 the 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