MATERIAL SAFETY DATA SHEET

165-065

1. Product and Company Identification

Product identifier	**LPS® Food Grade Chain Lubricant**
Version #	01
Issue date	09-01-2015
CAS #	Mixture
Part Number	06016, C06016
Product use	A food grade chain lubricant for parts and equipment.
Manufacturer information	ITW Pro Brands 4647 Hugh Howell Rd Tucker, GA 30084 United States lpssds@itwprobrands.com www.lpslabs.com 1-800-241-8334 / 770-243-8800 Chemtrec 1-800-424-9300
Supplier	Not available.

2. Hazards Identification

Emergency overview

WARNING

CONTENTS UNDER PRESSURE.
Flammable aerosol. Will be easily ignited by heat, spark or flames. Pressurized container may explode when exposed to heat or flame.

Causes skin and eye irritation. May cause drowsiness or dizziness. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Eyes	Avoid contact with eyes. May cause eye irritation.
Skin	Avoid contact with the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation	Do not breathe vapors, aerosols. Prolonged inhalation may be harmful. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
Ingestion	Exposure by ingestion of an aerosol is unlikely. For further information, please refer to section 11 of the MSDS.
Target organs	Health injuries are not known or expected under normal use.
Chronic effects	May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms	Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Decrease in motor functions. Behavioral changes. Coughing. Shortness of breath. Prolonged exposure may cause chronic effects.
Potential environmental effects	Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Hazardous components	**CAS #**	**Percent**
2-Methylpentane	107-83-5	1 - 3
Non-hazardous components	**CAS #**	**Percent**
White Mineral Oil	8042-47-5	60 - 70
Polybutene (Isobutylene/butene copolymer)	9003-29-6	20 - 30

Non-hazardous components	CAS #	Percent
Petroleum Gases, Liquefied, Sweetened	68476-86-8	10 - 20
2,2-Dimethybutane	75-83-2	< 1
2,3-Dimethylbutane	79-29-8	< 1
3-Methylpentane	96-14-0	< 1

4. First Aid Measures

First aid procedures

Inhalation — Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. For breathing difficulties, oxygen may be necessary. Get medical attention if symptoms persist.

Skin contact — Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Eye contact — Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Ingestion — If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to physician — Provide general supportive measures and treat symptomatically. Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped. Keep victim under observation. Symptoms may be delayed.

General advice — IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties — Flammable by OSHA criteria. Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket. Vapors may travel considerable distance to a source of ignition and flash back.

Extinguishing media

Suitable extinguishing media — Foam, water spray or fog. Dry chemical powder.

Unsuitable extinguishing media — Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical — Contents under pressure. Pressurized container may explode when exposed to heat or flame.

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. In case of fire and/or explosion do not breathe fumes. 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. Water runoff can cause environmental damage.

Specific methods — 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.

Explosion data

Sensitivity to static discharge — Yes

Sensitivity to mechanical impact — None known.

Hazardous combustion products — May include oxides of carbon.

General fire hazards — Flammable aerosol.

6. Accidental Release Measures

Personal precautions — Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Wear appropriate protective equipment and clothing during clean-up. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Ensure adequate ventilation. Avoid inhalation of vapors or mists. For personal protection, see section 8 of the MSDS.

Environmental precautions	Contact local authorities in case of spillage to drain/aquatic environment. Avoid release to the environment.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk.
Methods for cleaning up	Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate the contaminated area. Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Do not allow material to contaminate ground water system. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Wear appropriate protective equipment and clothing during clean-up. For waste disposal, see section 13 of the MSDS.

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. Do not smoke. Take precautionary measures against static discharges. Do not get in eyes, on skin, on clothing.
Storage	Level 3 Aerosol. Keep out of the reach of children. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Keep away from heat and sources of ignition. 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

US. ACGIH Threshold Limit Values

Components	Type	Value
2,2-Dimethybutane (CAS 75-83-2)	STEL	1000 ppm
	TWA	500 ppm
2,3-Dimethylbutane (CAS 79-29-8)	STEL	1000 ppm
	TWA	500 ppm
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm

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

Components	Type	Value
2-Methylpentane (CAS 107-83-5)	STEL	3500 mg/m3 1000 ppm
	TWA	1760 mg/m3 500 ppm
3-Methylpentane (CAS 96-14-0)	STEL	3500 mg/m3 1000 ppm
	TWA	1760 mg/m3 500 ppm

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

Components	Type	Value
2,2-Dimethybutane (CAS 75-83-2)	STEL	1000 ppm
	TWA	500 ppm
2,3-Dimethylbutane (CAS 79-29-8)	STEL	1000 ppm
	TWA	500 ppm
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm

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

Components	Type	Value
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm

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

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.

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Eye wash fountain and emergency showers are recommended.

Skin protection Avoid contact with the skin. Use personal protective equipment as required.

Respiratory protection No personal respiratory protective equipment normally required. Avoid breathing dust/fume/gas/mist/vapors/spray. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Hand protection Chemical resistant gloves are recommended. Use protective gloves made of: Nitrile.

9. Physical & Chemical Properties

Appearance Liquid.

Physical state Gas.

Form Aerosol.

Color Clear, Colorless.

Odor Mild. Hydrocarbon-like.

Odor threshold Not established

pH Not applicable

Vapor pressure 2782 mm Hg @ 20ºC

Vapor density ~3 (air=1)

Boiling point 345.2 °F (174 °C)

Melting point/Freezing point Not established

Solubility (water) Not soluble in water

Specific gravity 0.85 - 0.87 @ 20ºC

Relative density Not available.

Flash point -20.0 °F (-28.9 °C) Tag Closed Cup (dispensed liquid)

Flammability limits in air, upper, % by volume 9.5 % (estimated)

Flammability limits in air, lower, % by volume 1 % (estimated)

Auto-ignition temperature > 509 °F (> 265 °C)

VOC 17.7 % per State and Federal Consumer Product Regulations

Evaporation rate ~8.1

Viscosity 164 cP @ 25ºC

Percent volatile 15 - 20 %

Partition coefficient (n-octanol/water) Not established

Other data

Decomposition temperature Not established

Flammability (solid, gas) Flammable gas.

Heat of combustion > 30 kJ/g

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Direct sources of heat. Avoid high temperatures. Aerosol containers are unstable at temperatures above 50°C. Contact with incompatible materials.
Incompatible materials	Strong 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
Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)		
Acute		
Inhalation		
Gas		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes
LC50	Rat	1355 mg/l
Polybutene (Isobutylene/butene copolymer) (CAS 9003-29-6)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Inhalation		
Vapor		
LC50	Rat	> 19171 mg/m3
		> 4185 ppm
		> 3.8 mg/l, 7 Hours
Oral		
LD50	Rat	> 2000 mg/kg
White Mineral Oil (CAS 8042-47-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	2.18 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg

Toxicological information	Occupational exposure to the substance or mixture may cause adverse effects.
Acute effects	Not expected to be acutely toxic.
Sensitization	Not classified.
Local effects	Prolonged or repeated exposure may cause headache. May irritate eyes and skin.
Chronic effects	Prolonged exposure may cause chronic effects.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Skin corrosion/irritation	Prolonged skin contact may cause temporary 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	No data available for this product.

Symptoms and target organs	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Shortness of breath. Coughing. Behavioral changes. Decrease in motor functions.
Synergistic materials	Not available.
Further information	None known.

12. Ecological Information

Ecotoxicological data	No ecotoxicity data noted for the ingredient(s).
Ecotoxicity	Components of this product have been identified as having potential environmental concerns.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	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.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation / accumulation	No data available.
Partition coefficient	
2,2-Dimethybutane	3.82
2,3-Dimethylbutane	3.42
2-Methylpentane	3.74
3-Methylpentane	3.6
Mobility in environmental media	The product is immiscible with water and will spread on the water surface.
Other adverse effects	None known.

13. Disposal Considerations

Disposal instructions	Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Contents under pressure. Do not incinerate sealed containers. 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). Avoid discharge into water courses or onto the ground.
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

UN number	UN1950
UN proper shipping name	AEROSOLS, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	Not available.
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, MSDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.

Cargo aircraft only	Allowed.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, MSDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

IATA; IMDG; TDG

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	A - Compressed Gas B5 - Flammable Aerosols 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)	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)	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

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

Disclaimer

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.

Revision Information

This document has undergone significant changes and should be reviewed in its entirety.