PROBRANDS

SAFETY DATA SHEET

1. Identification

Product identifier LPS® PreSolve (Aerosol)

Other means of identification

Part Number 01420, C01420

Recommended use A solvent degreasing agent designed for removing tar, adhesives, grease, oil and other residues

from metal and other hard surfaces.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameITW Pro BrandsAddress4647 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(s) identification

Physical hazards Flammable aerosols Category 1

Gases under pressure Compressed gas

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A Sensitization, skin Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

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. Causes skin

irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause

drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Wear eye/face protection. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Contaminated work

clothing must not be allowed out of the workplace. Wear protective gloves.

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SDS CANADA

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce Response

> vomiting. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a

well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known. Supplemental information None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates Petroleum Hydrotreated Light		64742-47-8	60 - 70
3-Methoxy-3-methyl-1-butanol (MMB)		56539-66-3	10 - 20
D-LIMONENE		5989-27-5	10 - 20
CARBON DIOXIDE		124-38-9	1 - 3

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

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician if you feel unwell.

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while Skin contact

removing contaminated clothing and shoes. Get medical attention if irritation develops and

persists.

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Eye contact

Get medical attention if irritation develops and persists.

Call a physician or poison control center immediately. Only induce vomiting at the instruction of Ingestion

medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and

delayed

Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Rash. Symptoms of overexposure can include shortness of breath,

drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and

are reversible if exposure is stopped.

Indication of immediate medical attention and special treatment needed

General information

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.

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Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

General fire hazards

Extremely flammable aerosol.

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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe 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. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Contents under pressure. Keep away from heat, sparks and open flame. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values Components	Туре	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	Туре	Value		
CARBON DIOXIDE (CAS 124-38-9)	STEL	Value 54000 mg/m3		
CARBON DIOXIDE (CAS				
CARBON DIOXIDE (CAS		54000 mg/m3		

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

Components	Туре	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	Туре	Value
CARBON DIOXIDE (CAS 124-38-9)	STEL	30000 ppm
,	TWA	5000 ppm

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

	71	
CARBON DIOXIDE (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

Type

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) Components Type Value

CARBON DIOXIDE (CAS 124-38-9)	STEL	54000 mg/m3
	TWA	30000 ppm 9000 mg/m3
	IWA	5000 mg/ms

Biological limit values

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

Exposure guidelines

Components

Canada - British Columbia OELs: Skin designation

Distillates Petroleum Hydrotreated Light (CAS Can be absorbed through the skin. 64742-47-8)

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. Ensure adequate ventilation, especially in confined areas.

Value

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended. Eye/face protection

Skin protection

Hand protection Chemical resistant gloves are recommended.

Other Avoid contact with clothing. Wear suitable protective clothing. Chemical resistant gloves.

No personal respiratory protective equipment normally required. Use a positive-pressure Respiratory protection

> air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate

protection.

Thermal hazards Not applicable.

General hygiene considerations

When using do not smoke. When using, do not eat, drink or smoke. Keep away from food and drink. 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

Gas. Physical state **Form** Aerosol.

Color Clear, Off-white.

Orange Odor

Odor threshold

pH

Not applicable

Melting point/freezing point

Initial boiling point and boiling

Not established

> 302 °F (> 150 °C)

range

Flash point 104.0 °F (40.0 °C) Tag Closed Cup

Evaporation rate > 0.1 BuAc
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits

Flammability limit - lower

0.7 %

(%)

Flammability limit - upper

6 %

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure < 5 mm Hg @ 20°C

Vapor density > 1 (air = 1)

Relative density Not available.

Solubility(ies)

Solubility (water) < 15 %

Partition coefficient Not established

(n-octanol/water)

Auto-ignition temperature> 392 °F (> 200 °C)Decomposition temperatureNot establishedViscosity< 3 cSt @ 25°C</th>

Other information

Heat of combustion > 30 kJ/g
Percent volatile 100 %

Specific gravity 0.82 - 0.86 @ 20°C

VOC 97.2 % per U.S. State and Federal Consumer Product Regulations

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions. Risk of ignition.

Possibility of hazardous

No dangerous reaction known under conditions of normal use. Hazardous polymerization does not

reactions

Conditions to avoid

Heat, flames and sparks. Avoid temperatures exceeding the flash point.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness.

Skin contact Causes skin irritation. May cause sensitization by skin contact.

Eye contact Causes eye irritation.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and

toxicological characteristics

Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. May cause allergic skin reaction.

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Components Species Test Results

Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

Vapor

LC50 Rat > 4.5 mg/l, 4 Hours

D-LIMONENE (CAS 5989-27-5)

<u>Acute</u> Oral

LD50 Rat > 2000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicityNo 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

D-LIMONENE (CAS 5989-27-5)

3 Not classifiable as to carcinogenicity to humans.

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

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways. **Chronic effects** Prolonged exposure may cause chronic effects.

Further information Symptoms may be delayed.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components Species Test Results

Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 2.9 mg/l, 96 hours

(Oncorhynchus mykiss)

D-LIMONENE (CAS 5989-27-5)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 69.6 mg/l, 48 hours

Fish LC50 Fathead minnow (Pimephales promelas) 0.619 - 0.796 mg/l, 96 hours

Persistence and degradability Not inherently biodegradable.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

D-LIMONENE 4.232

Mobility in soil Readily absorbed into soil.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions

Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not incinerate sealed containers. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. After recovery of solvent dispose of residue as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

Hazardous waste code

Not regulated.

Aerosols, flammable

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

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

Transport hazard class(es)

name Aerosols, flammable

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not available.

Environmental hazards No.

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 Transport hazard class(es) Aerosols, flammable, MARINE POLLUTANT

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not available.

Environmental hazards

Marine pollutant Yes
EmS F-D, S-U
Special precautions for user Not available.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG; TDG



Marine pollutant



15. Regulatory information

Canadian regulations

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

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

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

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)	Yes
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

Country(s) or region Inventory name On inventory (yes/no)*

Korea Existing Chemicals List (ECL)

New Zealand

New Zealand Inventory

Yes

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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
 03-23-2016

 Revision date
 05-18-2017

Version # 04

Further information HMIS® is a registered trade and service mark of the NPCA.

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control

Law, Executive Order No. 19203)

Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances

Safety Management Act No. 18406, Schedule 1)

Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial

Safety and Health Act (No. 13053), Article 29)

Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on

the Industrial Safety and Health Act (No. 13053), Article 30)

Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice

No. 1997-10, as amended)

Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)

Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor

(MOL) Public Notice No. 1986-45, as amended)

Korea. Prohibited Chemical Substances (TCCL Article 11)

Korea, Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001,

as amended)

Korea. Restricted Chemical Substances (TCCL Article 11)

Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)

Korea. Toxic Chemical Control Law (TCCL), pre-1997 List

Korea. Toxic Chemicals (TCCL Article 10)

Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)

Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic

Materials)

Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and

Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)

Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the

Environmental Protection Administration)

Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic

Materials)

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits

GOST 30333-2007 - Chemical production safety passport. General requirements JIS Z 7252:2009 Classification of chemicals based on "Globally Harmonized System of

Classification and Labelling of Chemicals (GHS)"

JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)

Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012

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Yes

Yes

Disclaimer

This safety data sheet was prepared in accordance with JIS Z 7253:2012. Additional information is given in the Material Safety Data Sheet. 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.