



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	LPS® PF® Solvent
Registration number	-
Synonyms	None.
Part Number	M61432, M61401, M61405, M61456
Issue date	27-April-2016
Version number	02
Revision date	29-January-2017
Supersedes date	27-April-2016

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	A solvent agent designed for removing grease, oil and other residues from metal, power cable and fiber optic cable surfaces.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier	Alsco Ltd
Company name	Unit 13 Hillmead Industrial Estate
Address	Marshall Road Swindon, Wiltshire United Kingdom SN5 5FZ
Telephone	+44 1793 733 900
In Case of Emergency	+001 703-527-3887
Manufacturer	
Company name	ITW Pro Brands
Address	4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)
Website	http://www.lpslabs.com
e-mail	lpssds@itwprobrands.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xn;R65, R43, N;R51/53

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Aspiration hazard	Category 1	H304 - May be fatal if swallowed and enters airways.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	May cause sensitisation by skin contact. Also harmful: may cause lung damage if swallowed. Occupational exposure to the substance or mixture may cause adverse health effects.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards	None known.

Main symptoms Aspiration may cause pulmonary oedema and pneumonitis. May cause an allergic skin reaction. Dermatitis. Rash.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: d-limonene, Naphtha Petroleum, Hydrotreated Heavy

Hazard pictograms



Signal word Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261 Avoid breathing mist or vapour.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None known.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Naphtha Petroleum, Hydrotreated Heavy	90 - 95	64742-48-9 265-150-3	-	649-327-00-6	Note P
Classification:	DSD: Carc. Cat. 2;R45, Muta. Cat. 2;R46, Xn;R65				P
	CLP: Asp. Tox. 1;H304, Acute Tox. 4;H312, Acute Tox. 3;H331, Muta. 1B;H340, Carc. 1B;H350				P
d-limonene	5 - 10	5989-27-5 227-813-5	-	601-029-00-7	
Classification:	DSD: R10, Xn;R65, Xi;R38, R43, N;R50/53				C
	CLP: Flam. Liq. 3;H226, Skin Irrit. 2;H315, Skin Sens. 1;H317, Aquatic Chronic 1;H410				C

List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Aspiration may cause pulmonary oedema and pneumonitis. May cause an allergic skin reaction. Dermatitis. Rash.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Combustible liquid.

5.1. Extinguishing media

Suitable extinguishing media Alcohol resistant foam. Powder. Carbon dioxide (CO₂).

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

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Use water spray to reduce vapours or divert vapour cloud drift. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. 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.

Never return spills to original containers for re-use.

6.4. Reference to other sections

Use personal protection recommended in Section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Finland. Workplace Exposure Limits

Components	Type	Value
d-limonene (CAS 5989-27-5)	STEL	280 mg/m ³
	TWA	50 ppm 140 mg/m ³ 25 ppm

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
d-limonene (CAS 5989-27-5)	TWA	28 mg/m ³
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	TWA	5 ppm 300 mg/m ³ 50 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
d-limonene (CAS 5989-27-5)	AGW	28 mg/m ³ 5 ppm

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
d-limonene (CAS 5989-27-5)	TLV	140 mg/m ³ 25 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
d-limonene (CAS 5989-27-5)	STEL	80 mg/m ³
	TWA	14 ppm 40 mg/m ³ 7 ppm
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	STEL	600 mg/m ³

TWA

100 ppm
 300 mg/m³
 50 ppm

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

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

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

General information Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the 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 appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures 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. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Colour Clear water-white.

Odour Orange.

Odour threshold Not available.

pH Not applicable

Melting point/freezing point Not available.

Initial boiling point and boiling range 185 °C (365 °F) @760 mm Hg

Flash point > 61,0 °C (> 141,8 °F) Tag closed cup

Evaporation rate < 0,1 BuAc = 1

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 0,7 %

Flammability limit - upper (%) 5,3 %

Vapour pressure 0,48 mm Hg @ 20°C

Vapour density > 1 (Air = 1)

Relative density Not available.

Solubility(ies)	
Solubility (water)	Negligible
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not determined
Auto-ignition temperature	335 °C (635 °F)
Decomposition temperature	Not available.
Viscosity	1,5 cSt @ 25°C
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Percent volatile	100 %
Specific gravity	0,74 - 0,78 @20°C
VOC	100 % per US State and Federal Consumer Product Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
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 Aspiration may cause pulmonary oedema and pneumonitis. May cause an allergic skin reaction. Dermatitis. Rash.

11.1. Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test results
d-limonene (CAS 5989-27-5)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
<i>Vapour</i>		
LC50	Rat	>= 5060 mg/m3, 4 Hours
Oral		
LD50	Rat	4820 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 sensitisation Not a respiratory sensitizer.

Skin sensitisation May cause an allergic skin reaction.

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.
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)	
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	
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	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Mixture versus substance information	No information available.
Other information	Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.

Components	Species	Test results
d-limonene (CAS 5989-27-5)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 69,6 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 0,619 - 0,796 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)
d-limonene 4,232

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	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.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN3082
14.2. UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (d-limonene)

14.3. Transport hazard class(es)

Class 9
Subsidiary risk -
Label(s) 9
Hazard No. (ADR) Not available.
Tunnel restriction code 3 (E)

14.4. Packing group III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**RID****14.1. UN number** UN3082**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (d-limonene)**14.3. Transport hazard class(es)**

Class 9
Subsidiary risk -
Label(s) 9

14.4. Packing group III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**ADN****14.1. UN number** UN3082**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (d-limonene)**14.3. Transport hazard class(es)**

Class 9
Subsidiary risk -
Label(s) 9

14.4. Packing group III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IATA****14.1. UN number** UN3082**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (d-limonene)**14.3. Transport hazard class(es)**

Class 9
Subsidiary risk -

14.4. Packing group III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IMDG****14.1. UN number** UN3082**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (d-limonene), MARINE POLLUTANT**14.3. Transport hazard class(es)**

Class 9
Subsidiary risk -
Label(s) 9

14.4. Packing group III**14.5. Environmental hazards****Marine pollutant** Yes**EmS** F-A, S-F**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not established.

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

d-limonene (CAS 5989-27-5)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents. 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, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R10 Flammable.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R45 May cause cancer.
R46 May cause heritable genetic damage.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H340 May cause genetic defects.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Revision information

Product and Company Identification: Product and Company Identification
SECTION 2: Hazards identification: Hazard statements
SECTION 2: Hazards identification: Supplemental label information
Composition / Information on Ingredients: Disclosure Overrides
SECTION 3: Composition/information on ingredients: Component information
SECTION 5: Firefighting measures: General fire hazards
SECTION 6: Accidental release measures: 6.3. Methods and material for containment and cleaning up
SECTION 8: Exposure controls/personal protection: Eye/face protection
SECTION 8: Exposure controls/personal protection: - Hand protection
SECTION 9: Physical and chemical properties: Colour
SECTION 9: Physical and chemical properties: Odour
SECTION 11: Toxicological information: Acute toxicity

Training information

Follow training instructions when handling this material.

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.