



# 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** 61420, M61420  
**Issue date** 18-July-2016  
**Version number** 01

### 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](mailto: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** F+;R12, 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

##### Physical hazards

Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
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##### 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** Extremely flammable.  
**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.

<b>Environmental hazards</b>	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Specific hazards</b>	Extremely flammable. Harmful: may cause lung damage if swallowed. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Main symptoms</b>	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:** Carbon dioxide, d-Limonene

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
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

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing gas.
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.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

#### Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Supplemental label information** 91,36 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

**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	80 - 90	64742-48-9 265-150-3	-	649-327-00-6	Note P
<b>Classification:</b>		<b>DSD:</b> Carc. Cat. 2;R45, Muta. Cat. 2;R46, Xn;R65			P
		<b>CLP:</b> Asp. Tox. 1;H304, Acute Tox. 4;H312, Acute Tox. 3;H331, Muta. 1B;H340, Carc. 1B;H350			P

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
d-Limonene	1 - 10	5989-27-5 227-813-5	-	601-029-00-7	
<b>Classification:</b>		<b>DSD:</b> R10, Xn;R65, Xi;R38, R43, N;R50/53			C
		<b>CLP:</b> Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			C
Carbon dioxide	1 - 5	124-38-9 204-696-9	-	-	#
<b>Classification:</b>		<b>DSD:</b> -			
		<b>CLP:</b> -			

#### 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** 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** Rinse mouth. Get medical attention if symptoms occur.

**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** Extremely flammable aerosol.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water spray. Alcohol resistant foam. Powder. Carbon dioxide (CO<sub>2</sub>).

**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** Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Special fire fighting procedures** Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

**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. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. 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. Use personal protection recommended in Section 8 of the SDS.
<b>For emergency responders</b>	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** Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Use water spray to reduce vapours or divert vapour cloud drift. 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. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

**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** Pressurised 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 breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. 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. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. 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 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

##### Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	Ceiling	18000 mg/m <sup>3</sup>
		10000 ppm
	MAK	9000 mg/m <sup>3</sup> 5000 ppm

##### Belgium. Exposure Limit Values.

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54784 mg/m <sup>3</sup>
		30000 ppm
	TWA	9131 mg/m <sup>3</sup> 5000 ppm

##### Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

##### Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	MAC	9000 mg/m <sup>3</sup>
		5000 ppm

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	Ceiling	45000 mg/m3
	TWA	9000 mg/m3

**Denmark. Exposure Limit Values**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3
		5000 ppm

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Finland. Workplace Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3
		5000 ppm
d-limonene (CAS 5989-27-5)	STEL	280 mg/m3
	TWA	50 ppm 140 mg/m3 25 ppm

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	VME	9000 mg/m3
		5000 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
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3
		5000 ppm
d-limonene (CAS 5989-27-5)	TWA	28 mg/m3
		5 ppm
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	TWA	300 mg/m3
		50 ppm

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	AGW	9100 mg/m3
		5000 ppm
d-limonene (CAS 5989-27-5)	AGW	28 mg/m3
		5 ppm

**Greece. OELs (Decree No. 90/1999, as amended)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		5000 ppm
	TWA	9000 mg/m3 5000 ppm

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Ireland. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3
	TWA	15000 ppm 9000 mg/m3 5000 ppm

**Italy. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3
d-limonene (CAS 5989-27-5)	TLV	5000 ppm 140 mg/m3
		25 ppm

**Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3

**Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1**

Components	Type	Value
	TWA	9000 mg/m <sup>3</sup>

**Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

**Spain. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9150 mg/m <sup>3</sup>
		5000 ppm

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	18000 mg/m <sup>3</sup>
		10000 ppm
	TWA	9000 mg/m <sup>3</sup>
		5000 ppm

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 ppm
d-limonene (CAS 5989-27-5)	STEL	80 mg/m <sup>3</sup>
		14 ppm
	TWA	40 mg/m <sup>3</sup>
		7 ppm
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)	STEL	600 mg/m <sup>3</sup>
		100 ppm
	TWA	300 mg/m <sup>3</sup>
		50 ppm

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	27400 mg/m <sup>3</sup>
	TWA	15000 ppm
		9150 mg/m <sup>3</sup> 5000 ppm

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
		5000 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** Use personal protective equipment as required. 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. Suitable gloves can be recommended by the glove supplier.

**- 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** 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. 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** Gas.

**Form** Aerosol

**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)** Flammable gas.



## 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

Heat of combustion > 30 kJ/g

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. May cause an allergic skin reaction.

Components	Species	Test results
d-Limonene (CAS 5989-27-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	5600 - 6600 mg/kg
	Rat	> 2000 mg/kg
Naphtha Petroleum, Hydrotreated Heavy (CAS 64742-48-9)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 1900 mg/kg, 24 Hours

Components	Species	Test results
<b>Inhalation</b> <i>Vapour</i>		
LC50	Rat	> 5000 mg/m <sup>3</sup> , 4 Hours
<b>Oral</b>		
LD50	Rat	4820 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 sensitisation</b>	Not a respiratory sensitizer.	
<b>Skin sensitisation</b>	May cause sensitisation by skin contact.	
<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>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
d-Limonene (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.	
<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>	May be fatal if swallowed and enters airways.	
<b>Mixture versus substance information</b>	No information available.	
<b>Other information</b>	Symptoms may be delayed.	

## SECTION 12: Ecological information

**12.1. Toxicity** Toxic to aquatic life with long lasting effects. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.

Components	Species	Test results
d-Limonene (CAS 5989-27-5)		
<b>Aquatic</b>		
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
<b>12.2. Persistence and degradability</b>	Expected to biodegrade.	
<b>12.3. Bioaccumulative potential</b>		
<b>Partition coefficient n-octanol/water (log Kow)</b>		
d-Limonene		4,232
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	No data available.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not available.	
<b>12.6. Other adverse effects</b>	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. Do not re-use empty containers.

**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. Contents under pressure. Do not puncture, incinerate or crush. 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** UN1950  
**14.2. UN proper shipping name** Aerosols, flammable  
**14.3. Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**Hazard No. (ADR)** Not available.  
**Tunnel restriction code** D  
**14.4. Packing group** Not applicable.  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### RID

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** Aerosols, flammable  
**14.3. Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**14.4. Packing group** Not applicable.  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### ADN

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** Aerosols, flammable  
**14.3. Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**14.4. Packing group** Not applicable.  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### IATA

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** Aerosols, flammable  
**14.3. Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**14.4. Packing group** Not applicable.  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### Other information

**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

### IMDG

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** Aerosols, flammable, MARINE POLLUTANT

#### 14.3. Transport hazard class(es)

**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1

**14.4. Packing group** Not applicable.

#### 14.5. Environmental hazards

**Marine pollutant** Yes

**EmS** F-D, S-U

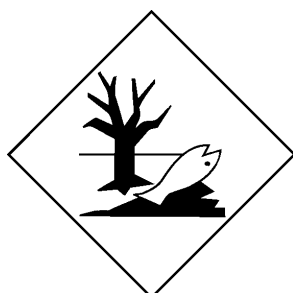
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

**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)

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended**

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

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

d-Limonene (CAS 5989-27-5)

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended**

d-Limonene (CAS 5989-27-5)

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

**Directive 94/33/EC on the protection of young people at work, as amended**

d-Limonene (CAS 5989-27-5)

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

**Other 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, 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.  
R12 Extremely 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.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Revision information**

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

**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.