



# 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® F-104 (Aerosol)
Registration number	-
Synonyms	None.
Part Number	04920, M04920
Issue date	08-December-2013
Version number	01

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

Identified uses	A solvent degreasing agent designed for removing tar, adhesives, grease, oil and other residues from metal and other hard surfaces.
Uses advised against	None known.

### 1.3. Details of the supplier of the safety data sheet

Supplier	Geocel Limited
Company name	Western Wood Way, Langage Science Park, Plympton,
Address	Plymouth, PL7 5BG United Kingdom
Telephone	+44 (0)1752 202060 / +44 (0)1752 334384
In Case of Emergency	+001 703-527-3887
Manufacturer	
Company name	LPS Laboratories, a division of Illinois Tool Works, Inc.
Address	4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)
Website	<a href="http://www.lpslabs.com">http://www.lpslabs.com</a>
e-mail	<a href="mailto:sds@lpslabs.com">sds@lpslabs.com</a>

## 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, 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

Flammable aerosols	Category 1	H222 - Extremely flammable aerosol.
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##### Health hazards

Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
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##### 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

<b>Physical hazards</b>	Extremely flammable.
<b>Health hazards</b>	May cause sensitisation by skin contact. 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>	May cause sensitisation by skin contact. Irritating to eyes and respiratory system. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Main symptoms</b>	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause sensitization by skin contact. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Dermatitis. Rash.

### 2.2. Label elements

**Label according to Regulation (EC) No. 1272/2008 as amended****Contains:** 1-Propoxy-2-Propanol, d-limonene**Hazard pictograms****Signal word** Danger**Hazard statements**

H222 Extremely flammable aerosol.  
 H317 May cause an allergic skin reaction.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements****Prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Pressurised container: 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**

P391 Collect spillage.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P321 Specific treatment (see this label).  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.

**Storage**

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.

**Supplemental label information** 17,4 % 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
Distillates Petroleum Hydrotreated Light	70 - < 80	64742-47-8 265-149-8	-	649-422-00-2	
<b>Classification:</b>		<b>DSD:</b> Xn;R65			
		<b>CLP:</b> Asp. Tox. 1;H304, Aquatic Chronic 2;H411			
1-Propoxy-2-Propanol	5 - < 10	1569-01-3 216-372-4	-	-	
<b>Classification:</b>		<b>DSD:</b> T+;R27			
		<b>CLP:</b> -			
Propylene glycol monomethyl ether acetate	5 - < 10	108-65-6 203-603-9	-	607-195-00-7	#
<b>Classification:</b>		<b>DSD:</b> R10			
		<b>CLP:</b> -			

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
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d-limonene	3 - < 5	5989-27-5 227-813-5	-	601-029-00-7	
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**Classification:** **DSD:** R10, Xi;R38, R43, N;R50/53  
**CLP:** Flam. Liq. 3;H226, Skin Irrit. 2;H315, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410

Carbon dioxide	1 - < 3	124-38-9 204-696-9	-	-	#
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**Classification:** **DSD:** -  
**CLP:** -

Other components below reportable levels < 0,3

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

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

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

## SECTION 4: First aid measures

**General information** 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.

### 4.1. Description of 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 CENTRE or doctor/physician if you feel unwell.

**Skin contact** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. 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. Get medical attention if irritation develops and persists.

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

**4.2. Most important symptoms and effects, both 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.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. 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** Dry chemical powder. Carbon dioxide (CO2). Water spray, fog or regular foam.

**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. Fire may produce irritating, corrosive and/or toxic gases.

### 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. Cool containers exposed to heat with water spray and remove container, if no risk is involved. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

## 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment.

**For emergency responders** Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

**6.2. Environmental precautions** Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment.

**6.3. Methods and material for containment and cleaning up** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. 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 in 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** May be ignited by open flame. 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 breathe dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Do not get in eyes, on skin, on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment.

**7.2. Conditions for safe storage, including any incompatibilities** Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Keep out of the reach of children.

**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>
	MAK	10000 ppm 9000 mg/m <sup>3</sup> 5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	Ceiling	550 mg/m <sup>3</sup>
	MAK	100 ppm 275 mg/m <sup>3</sup> 50 ppm

##### Belgium. Exposure Limit Values.

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54784 mg/m <sup>3</sup>
	TWA	30000 ppm 9131 mg/m <sup>3</sup> 5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 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/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	275 mg/m3

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	Ceiling	550 mg/m3
	TWA	270 mg/m3

**Denmark. Exposure Limit Values**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3
		5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TLV	275 mg/m3
		50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm
		275 mg/m3
		50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	100 ppm
		270 mg/m3
		50 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

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

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	VLE	5000 ppm 550 mg/m3
	VME	110 ppm 275 mg/m3 50 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
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5000 ppm 140 mg/m3
	TWA	20 ppm 28 mg/m3
d-limonene (CAS 5989-27-5)	TWA	5 ppm 270 mg/m3
	TWA	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
d-limonene (CAS 5989-27-5)	AGW	5000 ppm 28 mg/m3
	AGW	5 ppm 270 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	AGW	50 ppm

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
	TWA	5000 ppm 9000 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	5000 ppm 550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3
	TWA	275 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

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

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 ppm

**Ireland. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m <sup>3</sup>
	TWA	15000 ppm 9000 mg/m <sup>3</sup> 5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 ppm

**Italy. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
	STEL	5000 ppm 550 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	100 ppm 275 mg/m <sup>3</sup> 50 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/m <sup>3</sup>
	STEL	5000 ppm 550 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	100 ppm 275 mg/m <sup>3</sup> 50 ppm

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
	STEL	5000 ppm 400 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	75 ppm 250 mg/m <sup>3</sup> 50 ppm

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
	STEL	5000 ppm 550 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	100 ppm

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

Components	Type	Value
	TWA	275 mg/m <sup>3</sup> 50 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/m <sup>3</sup> 5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	550 mg/m <sup>3</sup>

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m <sup>3</sup> 5000 ppm
d-limonene (CAS 5989-27-5)	TLV	140 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TLV	25 ppm 270 mg/m <sup>3</sup> 50 ppm

**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m <sup>3</sup>
	TWA	9000 mg/m <sup>3</sup>
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	520 mg/m <sup>3</sup>
	TWA	260 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
		100 ppm
	TWA	275 mg/m <sup>3</sup> 50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	275 mg/m <sup>3</sup>
		50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	275 mg/m <sup>3</sup>
		50 ppm

**Spain. Occupational Exposure Limits**

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9150 mg/m <sup>3</sup>
		5000 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
		100 ppm
	TWA	275 mg/m <sup>3</sup> 50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	400 mg/m <sup>3</sup>
		75 ppm
	TWA	250 mg/m <sup>3</sup> 50 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

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	275 mg/m <sup>3</sup>
	TWA	50 ppm 275 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	548 mg/m <sup>3</sup>
	TWA	100 ppm 274 mg/m <sup>3</sup> 50 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
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m <sup>3</sup>
	TWA	100 ppm 275 mg/m <sup>3</sup> 50 ppm

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

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines****EU Exposure Limit Values: Skin designation**

Propylene glycol monomethyl ether acetate (CAS 108-65-6) Can be absorbed through the skin.

**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. Use personal protective equipment as required.

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

**Skin protection**

**- Hand protection** Chemical resistant gloves are recommended.

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

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

<b>Hygiene measures</b>	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.
<b>Environmental exposure controls</b>	Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major releases.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol
<b>Colour</b>	Clear water-white
<b>Odour</b>	Mild. Orange.
<b>Odour threshold</b>	Not established
<b>pH</b>	Not applicable
<b>Melting point/freezing point</b>	Not established
<b>Initial boiling point and boiling range</b>	157 °C (314,6 °F)
<b>Flash point</b>	40,0 °C (104,0 °F) Tag closed cup (dispensed liquid)
<b>Evaporation rate</b>	0,2 (BuAc = 1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0,7 %
<b>Flammability limit - upper (%)</b>	6 %
<b>Vapour pressure</b>	2 mm Hg @20°C
<b>Vapour density</b>	4,8 - 5,3
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slightly soluble in water.
<b>Solubility (other)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	< 1
<b>Auto-ignition temperature</b>	> 228 °C (> 442,4 °F)
<b>Decomposition temperature</b>	Not established
<b>Viscosity</b>	< 3 cSt @25°C
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.
<b>9.2. Other information</b>	
<b>Heat of combustion</b>	> 30 kJ/g
<b>Percent volatile</b>	100 %
<b>Specific gravity</b>	0,77 - 0,79 @20°C
<b>VOC (Weight %)</b>	97,2 % per US State and Federal Consumer Product Regulations

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Strong oxidising agents.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Carbon oxides.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
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**Information on likely routes of exposure**

<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	May cause sensitisation by skin contact. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Symptoms</b>	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction.

**11.1. Information on toxicological effects**

**Acute toxicity** Based on available data, the classification criteria are not met.

<b>Components</b>	<b>Species</b>	<b>Test results</b>
1-Propoxy-2-Propanol (CAS 1569-01-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	4,29 ml/kg 3,17 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 1725 ppm
<i>Oral</i>		
LD50	Mouse	260 mg/kg
	Rat	> 2000 mg/kg 2,83 ml/kg
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Cat	> 6,4 mg/l
	Rat	> 0,1 mg/l
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
d-limonene (CAS 5989-27-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Oral</i>		
LD50	Mouse	5600 - 6600 mg/kg
	Rat	> 2000 mg/kg
<i>Other</i>		
LD50	Mouse	1,3 g/kg
	Rat	0,11 g/kg
Propylene glycol monomethyl ether acetate (CAS 108-65-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory sensitisation</b>	Based on available data, the classification criteria are not met.

<b>Skin sensitisation</b>	May cause sensitisation by skin contact. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<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>	Based on available data, the classification criteria are not met.
<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>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways. Not likely, due to the form of the product.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the environment.

Components	Species		Test results
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	2,9 mg/l, 96 hours
d-limonene (CAS 5989-27-5)			
<b>Aquatic</b>			
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

\* Estimates for product may be based on additional component data not shown.

**12.2. Persistence and degradability** Not inherently biodegradable.

**12.3. Bioaccumulative potential** Not available.

**Partition coefficient n-octanol/water (log Kow)**

LPS® F-104 (Aerosol)	< 1
1-Propoxy-2-Propanol	0,621
d-limonene	4,232

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** Readily absorbed into soil.

**12.5. Results of PBT and vPvB assessment** Not available.

**12.6. Other adverse effects**

Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.
<b>Contaminated packaging</b>	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.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Contents under pressure. This material and its container must be disposed of as hazardous waste. Do not discharge into drains, water courses or onto the ground. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	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 (d-limonene, Naphtha)
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Not available.

### RID

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable (d-limonene, Naphtha)
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	Yes
14.6. Special precautions for user	Not available.

### ADN

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable (d-limonene, Naphtha)
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	Yes
14.6. Special precautions for user	Not available.

### IATA

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable (d-limonene, Naphtha)
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	Yes
14.6. Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

### IMDG

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable (d-limonene, Naphtha), 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 Not available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

ADN; ADR; IATA; IMDG; RID



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

Not listed.

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

Not listed.

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

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 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

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) 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

Not listed.

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

Not listed.

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

Not listed.

#### **Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not listed.

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

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

d-limonene (CAS 5989-27-5)

Propylene glycol monomethyl ether acetate (CAS 108-65-6)

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

d-limonene (CAS 5989-27-5)

#### **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.

#### **National regulations**

Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

#### **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.

R27 Very toxic in contact with skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

#### **Revision information**

None.

#### **Training information**

Follow training instructions when handling this material.

#### **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.