SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

LPS® 1 (Aerosol)

of the mixture

Registration number

Synonyms None.

Part Number 00116, M00116 01-October-2014 Issue date

Version number

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

An industrial lubricant designed to displace moisture from mechanical and electrical equipment, **Identified uses**

provide light-duty lubrication and short-term rust prevention.

Uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier Company name Western Wood Way, Langage Science Park, Plympton,

Geocel Limited

Address

Plymouth, PL7 5BG United Kingdom

+44 (0)1752 202060 / +44 (0)1752 334384 **Telephone**

+001 703-527-3887 In Case of Emergency

Manufacturer

Company name LPS Laboratories, a division of Illinois Tool Works, Inc. **Address** 4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)

Website http://www.lpslabs.com sds@lpslabs.com e-mail

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, Xi;R38, R43-67, R52/53

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.

Health hazards

Skin corrosion/irritation H315 - Causes skin irritation. Category 2

Skin sensitisation Category 1B H317 - May cause an allergic skin

reaction.

Specific target organ toxicity - single

exposure

Category 3 narcotic effects H336 - May cause drowsiness or

dizziness.

Environmental hazards

Hazardous to the aquatic environment, Category 3 H412 - Harmful to aquatic life with

long-term aquatic hazard long lasting effects.

Hazard summary

Physical hazards Extremely flammable.

Health hazards Irritating to skin. May cause sensitisation by skin contact. Vapours may cause drowsiness and

dizziness. Occupational exposure to the substance or mixture may cause adverse health effects.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Material name: LPS® 1 (Aerosol) - LPS Laboratories (EU) 00116, M00116 Version #: 01 Issue date: 01-October-2014 Specific hazards Irritating to skin. May cause sensitisation by skin contact. Do not breathe

dust/fume/gas/mist/vapors/spray.

Main symptoms May cause drowsiness and dizziness. Headache. Nausea, vomiting. Rash. Skin irritation. May

cause redness and pain. May cause an allergic skin reaction. Dermatitis.

2.2. Label elements

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

Contains: Calcium Sulfonate, Carbon dioxide, Distillates Petroleum Hydrotreated Med, Distillates Petroleum,

Hydroteated Light, Sorbitan trioleate

Hazard pictograms



Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H412 Harmful 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.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

P321 Specific treatment (see this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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.

Supplemental label information 73,03 % 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, Hydroteated 70 - 80 64742-47-8 - 649-422-00-2

Light 265-149-8

Classification: DSD: Xn;R65

CLP: Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Distillates Petroleum H Med	lydrotreate	ed 10 - 20	64742-46-7 265-148-2	-	649-221-00-X	Note N
Classification:	DSD:	Carc. Cat. 2;R4	5			N
	CLP:	Asp. Tox. 1;H30 Chronic 2;H411		2, Carc. 1B;H350, Aquatic		N
Carbon dioxide		1 - 5	124-38-9 204-696-9	-	-	#
Classification:	DSD:	-				
	CLP:	-				
Sorbitan trioleate		1 - 3	26266-58-0 247-569-3	-	-	
Classification:	DSD:	-				
	CLP:	-				
Calcium Sulfonate		0,1 - 1	61789-86-4 263-093-9	-	-	
Classification:	DSD:	T;R23				
	CLP:	Skin Sens. 1B;h	H317			

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).

Note N: The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen.

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 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTRE or doctor/physician if you feel unwell.

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. Wash

contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth. Do

not induce vomiting without advice from poison control center. 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

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Rash. Skin irritation. May

cause redness and pain. May cause an allergic skin reaction. Dermatitis.

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

Powder. Alcohol resistant foam. Water spray. Dry chemicals. Carbon dioxide (CO2).

Material name: LPS® 1 (Aerosol) - LPS Laboratories (EU) 00116, M00116 Version #: 01 Issue date: 01-October-2014

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 Special fire fighting procedures

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

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. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

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

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 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.

For emergency responders

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

6.2. Environmental precautions

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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapours or divert vapour cloud drift. Isolate area until gas has dispersed. Dike far ahead of spill for later disposal. Scoop up used absorbent into drums or other appropriate container. Following product recovery, flush area with

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. 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. 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. Store in original tightly closed container. Keep out of the reach of children. 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

Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	Ceiling	18000 mg/m3	
,		10000 ppm	
	MAK	9000 mg/m3	
		5000 ppm	
Belgium. Exposure Limit Values			
Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	STEL	54784 mg/m3	
•		30000 ppm	
	TWA	9131 mg/m3	

Belgium. Exposure Limit Values. Components	Туре	Value	
		5000 ppm	
Bulgaria. OELs. Regulation No 13 on Components	protection of workers aga Type	inst risks of exposure to cher Value	nical agents at work
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Croatia. Dangerous Substance Expos Components	sure Limit Values in the W Type	orkplace (ELVs), Annexes 1 a Value	nd 2, Narodne Novine, 13/0
Carbon dioxide (CAS 124-38-9)	MAC	9000 mg/m3	
		5000 ppm	
Cyprus. OELs. Control of factory atmo	osphere and dangerous s Type	ubstances in factories regulat Value	ion, Pl 311/73, as amended
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3	
		5000 ppm	
Czech Republic. OELs. Government I Components	Decree 361 Type	Value	
Carbon dioxide (CAS	Ceiling	45000 mg/m3	
124-38-9)	TWA	9000 mg/m3	
Denmark. Exposure Limit Values Components	Туре	Value	
Carbon dioxide (CAS	TLV	9000 mg/m3	
124-38-9)		5000 ppm	
Estonia. OELs. Occupational Exposu	re Limits of Hazardous Su	• •	on No. 293 of 18 September
2001) Components	Туре	Value	
Carbon dioxide (CAS	TWA	9000 mg/m3	
124-38-9)		5000 ppm	
Finland. Workplace Exposure Limits	_		
Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3	
,		5000 ppm	
France. Threshold Limit Values (VLE) Components	P) for Occupational Expos Type	ure to Chemicals in France, II Value	NRS ED 984
Carbon dioxide (CAS	VME	9000 mg/m3	
124-38-9)		5000 ppm	
Germany. DFG MAK List (advisory OE	Ls). Commission for the l	nvestigation of Health Hazard	ls of Chemical Compounds
in the Work Area (DFG) Components	Туре	Value	Form
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3	
·		5000 ppm	
Distillates Petroleum, Hydroteated Light (CAS	TWA	140 mg/m3	Vapor and aerosol.
64742-47-8)		20 ppm	Vapor and aerosol.
Germany. TRGS 900, Limit Values in t	the Ambient Air at the Wor	rkplace Value	
	. 160	Tuide	
<u> </u>	ΔG\M	Q100 mg/m2	
Carbon dioxide (CAS 124-38-9)	AGW	9100 mg/m3 5000 ppm	

Components	s amended) Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
124-30-9)		5000 ppm
	TWA	9000 mg/m3
		5000 ppm
Hungary. OELs. Joint Decree on Che Components	mical Safety of Workplaces Type	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
celand. OELs. Regulation 154/1999 o	on occupational exposure li	mits Value
Carbon dioxide (CAS	TWA	9000 mg/m3
124-38-9)	IWA	5000 mg/m3
reland. Occupational Exposure Limi	te	''
Components	Туре	Value
Carbon dioxide (CAS	STEL	27000 mg/m3
124-38-9)		15000 5555
	T\\/ ^	15000 ppm
	TWA	9000 mg/m3
		5000 ppm
Italy. Occupational Exposure Limits Components	Туре	Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
,		5000 ppm
Latvia. OELs. Occupational exposure Components	e limit values of chemical su Type	ibstances in work environment Value
Carbon dioxide (CAS	TWA	9000 mg/m3
124-38-9)		5000 ppm
Lithuania. OELs. Limit Values for Ch	iemical Substances, Genera	Il Requirements
Lithuania. OELs. Limit Values for Ch Components	nemical Substances, Genera Type	Il Requirements Value
Carbon dioxide (CAS		
Carbon dioxide (CAS 124-38-9)	Type	Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational (Type	Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupantional occupational occupantional occupantiona	Type TWA exposure limit values (Anne	Value 9000 mg/m3 5000 ppm x I), Memorial A
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupantional occupational occupantional occupantiona	Type TWA exposure limit values (Anne Type	Value 9000 mg/m3 5000 ppm x I), Memorial A Value
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupation dioxide (CAS 124-38-9)	Type TWA exposure limit values (Anne Type TWA	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational Components Carbon dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V)	Type TWA exposure limit values (Anne Type TWA	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of C	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424)
Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS 124-38-9)	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of O	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value
Components Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of O	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value 9000 mg/m3
Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS 124-38-9) Netherlands. OELs (binding)	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of O	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value 9000 mg/m3 5000 ppm
Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS 124-38-9) Netherlands. OELs (binding) Components Carbon dioxide (CAS 124-38-9) Norway. Administrative Norms for Components	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of O Type TWA Type TWA Type TWA Ontaminants in the Workplace	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value 9000 mg/m3 5000 ppm Value 9000 mg/m3
Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupational occupational occupational occupational occupational exposure (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS 124-38-9) Netherlands. OELs (binding) Components Carbon dioxide (CAS	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of OType TWA Type TWA Type TWA	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value 9000 mg/m3 5000 ppm Value 9000 mg/m3
Carbon dioxide (CAS 124-38-9) Luxembourg. Binding Occupational occupational occupational occupational occupational occupation dioxide (CAS 124-38-9) Malta. OELs. Occupational Exposure Schedules I and V) Components Carbon dioxide (CAS 124-38-9) Netherlands. OELs (binding) Components Carbon dioxide (CAS 124-38-9) Norway. Administrative Norms for Components	Type TWA exposure limit values (Anne Type TWA Limit Values (L.N. 227. of O Type TWA Type TWA Type TWA Ontaminants in the Workplace	Value 9000 mg/m3 5000 ppm x I), Memorial A Value 9000 mg/m3 5000 ppm Occupational Health and Safety Authority Act (CAP. 424) Value 9000 mg/m3 5000 ppm Value 9000 mg/m3

Poland. MACs. Minister of Labour a Working Environment	and Social Policy Regarding	Maximum Allowable Concentrations and Intensities in
Components	Туре	Value
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3
121 00 0)	TWA	9000 mg/m3
Portugal. OELs. Decree-Law n. 290/ Components	/2001 (Journal of the Republ Type	ic - 1 Series A, n.266) Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
Portugal. VLEs. Norm on occupatio Components	onal exposure to chemical ag Type	5000 ppm gents (NP 1796) Value
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
124 00 0)	TWA	5000 ppm
Romania. OELs. Protection of work Components	ers from exposure to chemic Type	cal agents at the workplace Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
N OF B	N/0007	5000 ppm
Slovakia. OELs. Regulation No. 300 Components	7/2007 concerning protection Type	of health in work with chemical agents Value
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Slovenia. OELs. Regulations conce Official Gazette of the Republic of		against risks due to exposure to chemicals while worki
Components	Туре	Value
Carbon dioxide (CAS	TWA	9000 mg/m3
124-38-9)		5000 ppm
Spain. Occupational Exposure Limi		
Components	Туре	Value
Carbon dioxide (CAS 124-38-9)	TWA	9150 mg/m3
,		5000 ppm
Sweden. Occupational Exposure Li Components	mit Values Type	Value
Carbon dioxide (CAS	STEL	18000 mg/m3
124-38-9)	SILL	ŭ
		10000
	TIALA	10000 ppm
	TWA	9000 mg/m3
Switzerland SUVA Grenzwerte am		• •
		9000 mg/m3
Carbon dioxide (CAS	Arbeitsplatz	9000 mg/m3 5000 ppm
Carbon dioxide (CAS	Arbeitsplatz Type	9000 mg/m3 5000 ppm Value
Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim	Arbeitsplatz Type TWA	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components	Arbeitsplatz Type TWA nits (WELs) Type	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm Value
Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components Carbon dioxide (CAS	Arbeitsplatz Type TWA	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm
Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components Carbon dioxide (CAS	Arbeitsplatz Type TWA iits (WELs) Type STEL	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm Value 27400 mg/m3 15000 ppm
Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components Carbon dioxide (CAS	Arbeitsplatz Type TWA nits (WELs) Type	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm Value 27400 mg/m3 15000 ppm 9150 mg/m3
Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components Carbon dioxide (CAS 124-38-9) EU. Indicative Exposure Limit Value	Arbeitsplatz Type TWA hits (WELs) Type STEL TWA TWA es in Directives 91/322/EEC,	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm Value 27400 mg/m3 15000 ppm 9150 mg/m3 5000 ppm 9150 mg/m3 5000 ppm
Switzerland. SUVA Grenzwerte am Components Carbon dioxide (CAS 124-38-9) UK. EH40 Workplace Exposure Lim Components Carbon dioxide (CAS 124-38-9) EU. Indicative Exposure Limit Value Components Carbon dioxide (CAS	Arbeitsplatz Type TWA iits (WELs) Type STEL TWA	9000 mg/m3 5000 ppm Value 9000 mg/m3 5000 ppm Value 27400 mg/m3 15000 ppm 9150 mg/m3 5000 ppm

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

Components Type Value

5000 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.

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

Chemical resistant gloves are recommended. - Hand protection

Avoid contact with the skin. Wear appropriate chemical resistant clothing. - Other

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

Not applicable. Thermal hazards

Always observe good personal hygiene measures, such as washing after handling the material Hygiene measures

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

Environmental exposure

controls

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

Appearance Liquid. Gas. Physical state **Form** Aerosol Colour Amber.

Characteristic. Odour Not available. Odour threshold Not applicable pН < -50 °C (< -58 °F) Melting point/freezing point Initial boiling point and boiling 213 °C (415,4 °F)

range

79,0 °C (174,2 °F) Tag closed cup (dispensed liquid) Flash point

Evaporation rate < 0.1 (BuAc = 1)Flammable gas. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

0.6 %

Flammability limit - upper 7 %

(%)

Vapour pressure < 0,05 mm Hg @ 20°C

Vapour density > 1 (Air = 1)

Relative density 0,79 - 0,81 @ 20°C

Solubility(ies)

Solubility (water) Not soluble Solubility (other) Not available Partition coefficient < 1

(n-octanol/water)

Auto-ignition temperature> 228 °C (> 442,4 °F)Decomposition temperatureNot establishedViscosity< 3,8 cSt @ 25°C</th>Explosive propertiesNot available.Oxidizing propertiesNot available.

9.2. Other information

Heat of combustion Not established Percent volatile 95 - 96 %

VOC (Weight %) 0,4 % per US State & Federal Consumer Product Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity Strong oxidising agents.

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 Oxidizing agents.10.6. Hazardous Oxides.

decomposition products

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Skin contactCauses skin irritation. May cause an allergic skin reaction. **Eye contact**Direct contact with eyes may cause temporary irritation.

Ingestion May be fatal if swallowed and enters airways.

Symptoms Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

Exposure may cause temporary irritation, redness, or discomfort. Defatting of the skin. Rash. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

> 2000 mg/kg, 24 Hours

Decrease in motor functions. Behavioural changes.

11.1. Information on toxicological effects

Acute toxicity Narcotic effects. May cause an allergic skin reaction.

Rat

Components	Species	Test results
Calcium Sulfonate (CAS 61789-86-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat > 1.9 mg/l, 4 Hours

Oral

LD50 Rat 10000 - 20000 mg/kg

Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)

AcuteDermal

LD50 Rabbit > 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat 7640 mg/m3, 4 Hours 1,72 mg/l, 4 Hours

Distillates Petroleum, Hydroteated Light (CAS 64742-47-8)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Material name: LPS® 1 (Aerosol) - LPS Laboratories (EU) 00116, M00116 Version #: 01 Issue date: 01-October-2014

Components **Species Test results** > 2000 mg/kg, 24 Hours Inhalation LC50 Cat > 6,4 mg/l, 6 Hours Rat > 7,5 mg/l, 6 Hours > 4,3 mg/l, 4 Hours > 0,1 mg/l, 8 Hours Oral LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Respiratory sensitisation

irritation

Not a respiratory sensitizer.

May cause an allergic skin reaction. Skin sensitisation

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

Direct contact with eyes may cause temporary irritation.

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

This product is not expected to cause reproductive or developmental effects. Reproductive toxicity

Specific target organ toxicity -

single exposure

Narcotic effects.

Specific target organ toxicity -

repeated exposure

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

Not likely, due to the form of the product. **Aspiration hazard**

Mixture versus substance

information

No information available.

Other information Not available.

SECTION 12: Ecological information

Harmful to aquatic life with long lasting effects. 12.1. Toxicity

Components **Species Test results**

Distillates Petroleum, Hydroteated Light (CAS 64742-47-8)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 2,9 mg/l, 96 hours

(Oncorhynchus mykiss)

12.2. Persistence and

degradability

Not inherently biodegradable.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

> LPS® 1 (Aerosol) < 1

Bioconcentration factor (BCF) Not available. No data available. 12.4. Mobility in soil 12.5. Results of PBT Not available.

and vPvB assessment

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).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied. 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. 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 Aerosols, flammable

name

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 Read safety instructions, SDS and emergency procedures before handling.

for user

RID

14.1. UN number UN1950

14.2. UN proper shipping Aerosols, flammable

name

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 Read safety instructions, SDS and emergency procedures before handling.

for user

ADN

14.1. UN number UN1950

14.2. UN proper shipping Aerosols, [flammable]

name

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 Read safety instructions, SDS and emergency procedures before handling.

for user

IATA

14.1. UN number UN1950

14.2. UN proper shipping Aerosols, flammable

name

14.3. Transport hazard class(es)

Class 2.1 Subsidiary risk -

14.4. Packing group Not applicable.

14.5. Environmental hazards No **ERG Code** 10L

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed.

aircraft

Cargo aircraft only Allowed.

IMDG

14.1. UN number UN1950

14.2. UN proper shipping AEROSOLS, Flammable

name

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

No

Marine pollutant No 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 73/78 and the IBC

This substance/mixture is not intended to be transported in bulk.

Code

ADN; ADR; IATA; IMDG; RID



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

Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)

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

Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)

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 Med (CAS 64742-46-7) Distillates Petroleum, Hydroteated Light (CAS 64742-47-8)

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

Distillates Petroleum Hydrotreated Med (CAS 64742-46-7)

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 allowed 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

R12 Extremely flammable. R23 Toxic by inhalation. R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R45 May cause cancer.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

None.

R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness. H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H350 May cause cancer.

H411 Toxic to aquatic life with long lasting effects.

Revision information

Training information

Disclaimer

Follow training instructions when handling this material.

LPS Laboratories 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.