# SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

LPS® HardCoat (Aerosol)

of the mixture

Registration number

**Synonyms** None.

**Part Number** 03316, M03316 18-July-2014 Issue date

Version number

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

A spray corrosion inhibitor designed to displace moisture and penetrate to form a barrier against **Identified uses** 

moisture, air, acids, alkali fumes and other corrosive elements on metal parts.

Uses advised against

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

+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.)

http://www.lpslabs.com Website 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;R36/38, R66-67

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 Serious eye damage/eye irritation Category 2

H319 - Causes serious eye

irritation.

Specific target organ toxicity - single Category 3 narcotic effects H336 - May cause drowsiness or

exposure dizziness.

**Hazard summary** 

Physical hazards Extremely flammable.

Health hazards Irritating to eyes and skin. Repeated exposure may cause skin dryness or cracking. Vapours may

cause drowsiness and dizziness. Occupational exposure to the substance or mixture may cause

adverse health effects.

**Environmental hazards** Not classified for hazards to the environment.

Irritating to eyes and skin. Irritating to respiratory system. Do not breathe Specific hazards

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

Material name: LPS® HardCoat (Aerosol) - LPS Laboratories (EU) 03316, M03316 Version No.: 01 Issue date: 18-July-2014

Main symptoms Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and

blurred vision. Skin irritation. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Drowsiness and dizziness. Narcosis. Decrease in motor functions.

Behavioural changes.

### 2.2. Label elements

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

Acetone, Distillates Petroleum Hydrotreated Heavy, Distillates Petroleum Hydrotreated Light, Contains:

Mineral Spirits Regular Stoddard Solvent, Petrolatum, Petroleum Gases, Liquefied, Sweetened

**Hazard pictograms** 



Signal word Danger

**Hazard statements** 

Extremely flammable aerosol. H222

Pressurized container: May burst if heated. H229

Causes skin irritation. H315

Causes serious eve irritation. H319 May cause drowsiness or dizziness. H336

**Precautionary statements** 

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P210

Do not spray on an open flame or other ignition source. P211 Pressurised container: Do not pierce or burn, even after use. P251

Avoid breathing gas. P261

Wash thoroughly after handling. P264

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

Wear protective gloves. P280 Wear eye/face protection. P280

Response

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P304 + P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present P305 + P351 + P338

and easy to do. Continue rinsing.

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

Specific treatment (see this label). P321

If skin irritation occurs: Get medical advice/attention. P332 + P313 If eye irritation persists: Get medical advice/attention. P337 + P313 Take off contaminated clothing and wash before reuse. P362

Storage

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

Store locked up. P405

Protect from sunlight. Do not expose to temperatures exceeding 50 ℃/122 °F. P410 + P412

Disposal

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

Supplemental label information EUH066 - Repeated exposure may cause skin dryness or cracking. EUH208 - Contains Calcium

Sulfonate. May produce an allergic reaction.

2.3. Other hazards None known.

# **SECTION 3: Composition/information on ingredients**

3.2. Mixtures

**General information** 

CAS-No. / EC No. REACH Registration No. Chemical name INDEX No. **Notes** 

Acetone # 20 - 30 67-64-1 606-001-00-8

200-662-2

Classification: **DSD:** F:R11, Xi;R36, R66-67

CLP: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336

Material name: LPS® HardCoat (Aerosol) - LPS Laboratories (EU) 03316, M03316 Version No.: 01 Issue date: 18-July-2014

Chemical name		%	CAS-No. / EC No.	REACH Registration	No. INDEX No.	Notes
Petroleum Gases, Lique Sweetened	efied,	20 - 30	68476-86-8 270-705-8	-	649-203-00-1	
Classification:	DSD:	F+;R12, Carc. C	Cat. 1;R45, Muta. Cat	:. 2;R46		K,S
	CLP:	Flam. Gas 1;H2	20, Press. Gas;H280	), Muta. 1B;H340, Card	: 1B;H350	K,S,U
Distillates Petroleum Hy Light	/drotreate	ed 10 - 20	64742-47-8 265-149-8	-	649-422-00-2	
Classification:	DSD:	Xn;R65				
	CLP:	Flam. Liq. 3;H22	26, Asp. Tox. 1;H304	, Skin Irrit. 2;H315, ST	OT SE 3;H336	
Mineral Spirits Regular S	Stoddard	I 1 - 10	8052-41-3 232-489-3	-	649-345-00-4	
Classification:	DSD:	Xn;R65				Р
	CLP:	Flam. Liq. 3;H22	26, Asp. Tox. 1;H304			Р
Distillates Petroleum Hy Heavy	/drotreate	ed 1 - 5	64742-54-7 265-157-1	-	649-467-00-8	
Classification:	DSD:	-				L
	CLP:	Carc. 1B;H350				L
Petrolatum		1 - 5	8009-03-8 232-373-2	-	649-254-00-X	
Classification:	DSD:	-				N
	CLP:	Carc. 1B;H350				N
Calcium Sulfonate		< 1	61789-86-4 263-093-9	-	-	
Classification:	DSD:	T;R23				
	CLP:	Skin Sens. 1B;F	<del>1</del> 317			

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 K: 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 1,3-butadiene (EINECS No 203-450-8).

Note L: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note L in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 3% DMSO)

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.

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).

Note S: This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1). This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).

Note U: When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

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

# 4.1. Description of first aid measures

Inhalation Remove victim to fresh air and ke

Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, every may be personal. Call a physician if symptoms develop or persist

difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

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

medical personnel. Never give anything by mouth to an unconsious 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

Ingestion

Dermatitis. Rash. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

# **SECTION 5: Firefighting measures**

General fire hazards Extremely flammable aerosol.

5.1. Extinguishing media

media

Suitable extinguishing

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

Unsuitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

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.

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. 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. Isolate area until gas has dispersed. Use water spray to reduce vapours or divert vapour cloud drift. Scoop up used absorbent into drums or other appropriate container. 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

# **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 prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Material name: LPS® HardCoat (Aerosol) - LPS Laboratories (EU) 03316, M03316 Version No.: 01 Issue date: 18-July-2014

# 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. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). 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

Components	Туре	Value
Acetone (CAS 67-64-1)	MAK	1200 mg/m3
		500 ppm
	STEL	4800 mg/m3
		2000 ppm
Dipropylene glycol	Ceiling	614 mg/m3
nonomethyl ether (CAS 4590-94-8)	Coming	or a mg/mo
•		100 ppm
	MAK	307 mg/m3
		50 ppm
Belgium. Exposure Limit Values.		
Components	Туре	Value
·		0400
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Dipropylene glycol nonomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
,		50 ppm
Mineral Spirits Regular Stoddard Solvent (CAS	TWA	533 mg/m3
NOTO 44 O		
3052-41-3)		100 ppm
·		100 ppm
Bulgaria. OELs. Regulation No 13		nst risks of exposure to chemical agents at work
Bulgaria. OELs. Regulation No 13	3 on protection of workers agai Type	
Bulgaria. OELs. Regulation No 13 Components		nst risks of exposure to chemical agents at work
Bulgaria. OELs. Regulation No 13 Components	Туре	nst risks of exposure to chemical agents at work Value
Bulgaria. OELs. Regulation No 13 Components Acetone (CAS 67-64-1) Dipropylene glycol monomethyl ether (CAS	Type STEL	nst risks of exposure to chemical agents at work Value  1400 mg/m3
Bulgaria. OELs. Regulation No 13 Components Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS	Type STEL TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3
Bulgaria. OELs. Regulation No 13 Components Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS 14590-94-8)	Type  STEL TWA TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3 50 ppm
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance E	Type  STEL TWA TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3
Bulgaria. OELs. Regulation No 13 Components Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS 84590-94-8) Croatia. Dangerous Substance Es	Type  STEL  TWA  TWA  TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm  orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0
Bulgaria. OELs. Regulation No 13 Components Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS 84590-94-8) Croatia. Dangerous Substance Es	Type  STEL  TWA  TWA  TWA  TWA  xposure Limit Values in the Wo	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm  orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS	Type  STEL  TWA  TWA  TWA  TWA  xposure Limit Values in the Wo	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm  orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS	Type  STEL TWA TWA  TWA  TWA  xposure Limit Values in the Wo Type  MAC	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol nonomethyl ether (CAS 14590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1)  Dipropylene glycol nonomethyl ether (CAS 14590-94-8)	STEL TWA TWA  TWA  xposure Limit Values in the Wo Type  MAC  MAC	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1) Dipropylene glycol nonomethyl ether (CAS 84590-94-8)  Cyprus. OELs. Control of factory	STEL TWA TWA  TWA  xposure Limit Values in the Wo Type  MAC  MAC	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Cyprus. OELs. Control of factory Components	STEL TWA TWA TWA  xposure Limit Values in the Wo Type  MAC  MAC  MAC  atmosphere and dangerous su	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm 308 mg/m3
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol nonomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Ex Components  Acetone (CAS 67-64-1)  Dipropylene glycol nonomethyl ether (CAS 84590-94-8)  Cyprus. OELs. Control of factory Components  Acetone (CAS 67-64-1)	STEL TWA TWA TWA  xposure Limit Values in the Wo Type  MAC  MAC  atmosphere and dangerous su Type  TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm bstances in factories regulation, PI 311/73, as amended Value  2400 mg/m3
Bulgaria. OELs. Regulation No 13 Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Croatia. Dangerous Substance Excomponents  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 84590-94-8)  Cyprus. OELs. Control of factory Components  Acetone (CAS 67-64-1)  Czech Republic. OELs. Governments	STEL TWA TWA TWA  xposure Limit Values in the Wo Type  MAC  MAC  atmosphere and dangerous su Type  TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm orkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm bstances in factories regulation, PI 311/73, as amended Value  2400 mg/m3
Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Croatia. Dangerous Substance Excomponents  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Type  STEL TWA TWA TWA  xposure Limit Values in the Wo Type  MAC  MAC  atmosphere and dangerous su Type  TWA  TWA	nst risks of exposure to chemical agents at work Value  1400 mg/m3 600 mg/m3 308 mg/m3  50 ppm  rkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/0 Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm bstances in factories regulation, PI 311/73, as amended Value  2400 mg/m3 1000 ppm

Components	Туре	Value
ipropylene glycol nonomethyl ether (CAS 4590-94-8)	Ceiling	550 mg/m3
,	TWA	270 mg/m3
enmark. Exposure Limit Values omponents	Туре	Value
cetone (CAS 67-64-1)	TLV	600 mg/m3 250 ppm
ipropylene glycol nonomethyl ether (CAS 4590-94-8)	TLV	309 mg/m3
,		50 ppm
fineral Spirits Regular toddard Solvent (CAS 052-41-3)	TLV	145 mg/m3
		25 ppm
stonia. OELs. Occupational Exp 001)	osure Limits of Hazardous Sul	bstances. (Annex of Regulation No. 293 of 18 Septemb
Components	Туре	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
,		500 ppm
Dipropylene glycol nonomethyl ether (CAS 84590-94-8)	TWA	308 mg/m3
		50 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 1052-41-3)	STEL	600 mg/m3
		100 ppm
	TWA	300 mg/m3
"	-14-	50 ppm
inland. Workplace Exposure Lin Components	Type	Value
acetone (CAS 67-64-1)	STEL	
ACEIONE (CAS 67-64-1)	SIEL	1500 mg/m3 630 ppm
	TWA	1200 mg/m3
		500 ppm
Dipropylene glycol nonomethyl ether (CAS	TWA	310 mg/m3
34590-94-8)		50 ppm
France. Threshold Limit Values (\ Components	/LEP) for Occupational Exposi Type	ure to Chemicals in France, INRS ED 984 Value
cetone (CAS 67-64-1)	VLE	2420 mg/m3 1000 ppm
	VME	1210 mg/m3
		500 ppm
Dipropylene glycol nonomethyl ether (CAS 84590-94-8)	VME	308 mg/m3
		50 ppm
Germany. DFG MAK List (advisor n the Work Area (DFG)	y OELs). Commission for the li	nvestigation of Health Hazards of Chemical Compound
Components	Туре	Value
Acetone (CAS 67-64-1)	TWA	1200 mg/m3 500 ppm
Dipropylene glycol	TWA	310 mg/m3
nonomethyl ether (CAS		
monomethyl ether (CAS 34590-94-8)		50 ppm

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

TWA TWA 575 mg/m3 100 ppm  Hungary. OELs. Joint Decree on Chemical Safety of Workplaces Components Type Value	in the Work Area (DFG) Components	Туре	Value
Carmany, TRGS 900, Limit Values in the Ambient Air at the Workplace Components	Hydrotreated Light (CAS	TWA	·
Components         Type         Value           Acetone (CAS 67-64-1)         AGW         1200 mg/m3           Dipropylene glycol monomethyl either (CAS 34590-94-8)         500 ppm           Greece. OELs (Decree No. 90/1999, as amended)         500 ppm           Components         Type         Value           Acetone (CAS 67-64-1)         STEL         3560 mg/m3           Dipropylene glycol monomethyl either (CAS 34590-94-8)         TWA         1780 mg/m3           Mineral Spirits Regular STEL         7200 mg/m3           Stockdard Solvent (CAS 8052-41-3)         TWA         600 mg/m3           Mineral Spirits Regular Stell TWA         720 mg/m3           Stockdard Solvent (CAS 8052-41-3)         125 ppm           Hungary. OELs. Joint Decree on Chemical Safety of Workplaces         Value           Components         Type         Value           Acetone (CAS 67-64-1)         STEL         2420 mg/m3           Dipropylene glycol monomethyl either (CAS 34590-94-8)         TWA         308 mg/m3           Leeland. OELs. Regulation 154/1999 on occupational exposure limits Components         Yelue           Acetone (CAS 67-64-1)         TWA         300 mg/m3           Dipropylene glycol monomethyl either (CAS 34590-94-8)         TWA         145 mg/m3           Mineral Spirits Regul			20 ppm
Dipropylene glycol   AGW   310 mg/m3   3			Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)   50 ppm	Acetone (CAS 67-64-1)	AGW	
Soppin			• •
Careace. OELs (Decree No. 90/1999, as amended)   Components	monomethyl ether (CAS	AGW	·
Components			50 ppm
TWA			Value
Dipropylene glycol monomethyl ether (CAS	Acetone (CAS 67-64-1)	STEL	3560 mg/m3
monomethyl einer (CAS 34590-94-8)  TWA 600 mg/m3 100 ppm  TWA 600 mg/m3 100 ppm  Mineral Spirits Regular STEL 720 mg/m3 Stoddard Solvent (CAS 8052-41-3)  TWA 575 mg/m3 100 ppm  TWA 575 mg/m3 100 ppm  Hungary. OELs. Joint Decree on Chemical Safety of Workplaces Components Type Value  Acetone (CAS 67-64-1) STEL 2420 mg/m3 TWA 1210 mg/m3 Dipropylene glycol STEL 3088 mg/m3  Iceland. OELs. Regulation 154/1999 on occupational exposure limits Components Type Value  Acetone (CAS 67-64-1) TWA 308 mg/m3  Iceland. OELs. Regulation 154/1999 on occupational exposure limits Components Type Value  Acetone (CAS 67-64-1) TWA 600 mg/m3 250 ppm Dipropylene glycol TWA 300 mg/m3  Mineral Spirits Regular TWA 145 mg/m3  Mineral Spirits Regular Solvent (CAS 8052-41-3)  Ireland. Occupational Exposure Limits Components Type Value  Acetone (CAS 67-64-1) TWA 1210 mg/m3 Solo ppm Dipropylene glycol TWA 308 mg/m3  Mineral Spirits Regular TWA 1210 mg/m3 Solo ppm Dipropylene glycol TWA 308 mg/m3  Mineral Spirits Regular Solvent (CAS 34590-94-8)  Mineral Spirits Regular Solvent (CAS 34590-94-8)  Mineral Spirits Regular Solvent (CAS 34590-94-8)  Mineral Spirits Regular Spirits Regular Solvent (CAS 34590-94-8)  Mineral Spirits Regular Spirits Reg			1780 mg/m3
TWA   600 mg/m3   100 ppm	monomethyl ether (CAS	STEL	900 mg/m3
Mineral Spirits Regular   STEL   720 mg/m3			• •
Mineral Spirits Regular Stodard Solvent (CAS 8052-41-3)         STEL         720 mg/m3           8052-41-3)         TWA         125 ppm 575 mg/m3 100 ppm           Hungary, OELs, Joint Decree on Chemical Safety of Workplaces Components         Type         Value           Acetone (CAS 67-64-1)         STEL 2420 mg/m3 1210 mg/m3         2420 mg/m3 308 mg/m3           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA 308 mg/m3           Iceland, OELs, Regulation 154/1999 on occupational exposure limits Components         Type         Value           Acetone (CAS 67-64-1)         TWA 600 mg/m3 250 ppm           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA 300 mg/m3 300 mg/m		TWA	<del>-</del>
Stoddard Solvent (CAS   125 ppm   575 mg/m3   100 ppm	Mineral Chirita Degular	STEI	• •
TWA   575 mg/m3   100 ppm		SIEL	720 mg/m3
Hungary OELs. Joint Decree on Chemical Safety of Workplaces			• •
Hungary OELs. Joint Decree on Chemical Safety of Workplaces		TWA	<del>-</del>
Components         Type         Value           Acetone (CAS 67-64-1)         STEL         2420 mg/m3           TWA         1210 mg/m3           Dipropylene glycol         STEL         308 mg/m3           monomethyl ether (CAS 34590-94-8)         TWA         308 mg/m3           Iceland. OELs. Regulation 154/1999 on occupational exposure limits         Value           Acetone (CAS 67-64-1)         TWA         600 mg/m3           Dipropylene glycol         TWA         300 mg/m3           monomethyl ether (CAS 34590-94-8)         50 ppm           Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)         TWA         145 mg/m3           Ireland. Occupational Exposure Limits Components         Type         Value           Acetone (CAS 67-64-1)         TWA         1210 mg/m3           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA         308 mg/m3           Mineral Spirits Regular Stordard Solvent (CAS 8052-41-3)         TWA         50 ppm           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA         573 mg/m3			100 ppm
TWA   1210 mg/m3   308 mg/m3			Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)   TWA 308 mg/m3	Acetone (CAS 67-64-1)	STEL	2420 mg/m3
TWA   308 mg/m3			
TWA   308 mg/m3     Iceland. OELs. Regulation 154/1999 on occupational exposure limits	monomethyl ether (CAS	STEL	308 mg/m3
Components         Type         Value           Acetone (CAS 67-64-1)         TWA         600 mg/m3 250 ppm           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA         300 mg/m3           Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)         TWA         145 mg/m3           Ireland. Occupational Exposure Limits Components         Type         Value           Acetone (CAS 67-64-1)         TWA         1210 mg/m3 500 ppm           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA         308 mg/m3           Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)         TWA         573 mg/m3		TWA	308 mg/m3
Acetone (CAS 67-64-1)  TWA  600 mg/m3 250 ppm  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  Ireland. Occupational Exposure Limits Components  Type  Value  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  TWA  1210 mg/m3 500 ppm  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  TWA  TWA  50 ppm  50 ppm  50 ppm  50 ppm  TWA 573 mg/m3 Stoddard Solvent (CAS 8052-41-3)	Iceland. OELs. Regulation 154/19	999 on occupational exposure limits	
Dipropylene glycol	Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular TWA 145 mg/m3  Stoddard Solvent (CAS 8052-41-3)  Ireland. Occupational Exposure Limits Components Type Value  Acetone (CAS 67-64-1) TWA 1210 mg/m3 500 ppm  Dipropylene glycol TWA 308 mg/m3  Dipropylene glycol TWA 308 mg/m3  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	Acetone (CAS 67-64-1)	TWA	600 mg/m3
Mineral Spirits Regular   TWA   145 mg/m3			250 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  Ireland. Occupational Exposure Limits Components  Type  Value  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  TWA  TWA  50 ppm  145 mg/m3  25 ppm  Value  1210 mg/m3  500 ppm  308 mg/m3  50 ppm  50 ppm  50 ppm  573 mg/m3	monomethyl ether (CAS	TWA	300 mg/m3
Stoddard Solvent (CAS 8052-41-3)  Ireland. Occupational Exposure Limits Components  Type  Value  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  TWA  TWA  TWA  TWA  TWA  TWA  TWA  TW	3.333 3.37		50 ppm
Ireland. Occupational Exposure Limits Components  Type  Value  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  Type  Value  1210 mg/m3 500 ppm 308 mg/m3 500 ppm 50 ppm 573 mg/m3	Stoddard Solvent (CAS	TWA	145 mg/m3
Ireland. Occupational Exposure Limits Components  Type  Value  Acetone (CAS 67-64-1)  TWA  1210 mg/m3 500 ppm 500 ppm  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  TWA  308 mg/m3  50 ppm 50 ppm 50 ppm  Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	0002-41-0)		25 ppm
Components         Type         Value           Acetone (CAS 67-64-1)         TWA         1210 mg/m3 500 ppm           Dipropylene glycol monomethyl ether (CAS 34590-94-8)         TWA         308 mg/m3           Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)         TWA         573 mg/m3	Ireland Occupational Exposure	l imite	pp
Dipropylene glycol TWA 308 mg/m3 monomethyl ether (CAS 34590-94-8)  Mineral Spirits Regular TWA 573 mg/m3 Stoddard Solvent (CAS 8052-41-3)	Components	Туре	
Dipropylene glycol TWA 308 mg/m3 monomethyl ether (CAS 34590-94-8)  50 ppm Mineral Spirits Regular TWA 573 mg/m3 Stoddard Solvent (CAS 8052-41-3)	Acetone (CAS 67-64-1)	TWA	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)  50 ppm 573 mg/m3 573 mg/m3	monomethyl ether (CAS	TWA	• •
Mineral Spirits Regular TWA 573 mg/m3 Stoddard Solvent (CAS 8052-41-3)	,		50 ppm
	Stoddard Solvent (CAS	TWA	• •
	5552 41 0j		100 ppm

Components	Туре	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
,		500 ppm
Dipropylene glycol	TWA	308 mg/m3
monomethyl ether (CAS		•
34590-94-8)		
		50 ppm
Mineral Spirits Regular	TWA	100 ppm
Stoddard Solvent (CAS 3052-41-3)		
•	!!!	
Latvia. OELs. Occupational exposu Components		Substances in work environment  Value
Components	Туре	
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Dipropylene glycol	TWA	308 mg/m3
monomethyl ether (CAS		
34590-94-8)		50 ppm
		50 ppm
Lithuania. OELs. Limit Values for (		
Components	Туре	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
•		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Dipropylene glycol	STEL	450 mg/m3
monomethyl ether (CAS		•
34590-94-8)		
		75 ppm
	TWA	300 mg/m3
		50 ppm
		эо ррш
	ıl exposure limit values (Anr	nex I), Memorial A
	ıl exposure limit values (Anr Type	• •
Luxembourg. Binding Occupationa Components Acetone (CAS 67-64-1)		nex I), Memorial A Value
	Туре	nex I), Memorial A Value  1210 mg/m3
Components Acetone (CAS 67-64-1)	T <b>ype</b> TWA	value  1210 mg/m3 500 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu	T <b>ype</b> TWA	nex I), Memorial A Value  1210 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)	Type  TWA  re Limit Values (L.N. 227. of	value  1210 mg/m3 500 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)  Components	Type  TWA  re Limit Values (L.N. 227. of  Type	nex I), Memorial A Value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)	Type  TWA  re Limit Values (L.N. 227. of	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)  Components  Acetone (CAS 67-64-1)	Type  TWA  re Limit Values (L.N. 227. of  Type  TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)  Components  Acetone (CAS 67-64-1)  Dipropylene glycol	Type  TWA  re Limit Values (L.N. 227. of  Type	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS	Type  TWA  re Limit Values (L.N. 227. of  Type  TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V)  Components  Acetone (CAS 67-64-1)  Dipropylene glycol	Type  TWA  re Limit Values (L.N. 227. of  Type  TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Type  TWA  re Limit Values (L.N. 227. of  Type  TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding)	Type TWA  re Limit Values (L.N. 227. of  Type  TWA  TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components	Type TWA  re Limit Values (L.N. 227. of  Type  TWA  TWA  TWA  Type	Value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  Value
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Type TWA re Limit Values (L.N. 227. of Type TWA TWA TWA  Type STEL	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  2420 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  2420 mg/m3 1210 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol	Type TWA re Limit Values (L.N. 227. of Type TWA TWA TWA  Type STEL	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  2420 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  2420 mg/m3 1210 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  500 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Norway. Administrative Norms for (CAS 67-64-8)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  Contaminants in the Workpl	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Norway. Administrative Norms for (CAS 67-64-8)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  500 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Norway. Administrative Norms for Components	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  Contaminants in the Workpl	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  TWA  TWA  TWA  TWA  TOPE  STEL TWA TWA  TOPE  STEL TWA TWA TWA  TWA  TWA  TWA  TWA  TYPE	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3  50 ppm Value  2420 mg/m3 1210 mg/m3 300 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Norway. Administrative Norms for Components	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  TWA  TWA  TWA  TWA  TOPE  STEL TWA TWA  TOPE  STEL TWA TWA TWA  TWA  TWA  TWA  TWA  TYPE	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3 500 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3  1210 mg/m3 295 mg/m3
Components  Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposu Schedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Netherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 34590-94-8)  Norway. Administrative Norms for Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 67-64-1)	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  TWA  TWA  TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TYPE TLV	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3 500 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3
Acetone (CAS 67-64-1)  Malta. OELs. Occupational Exposus Chedules I and V) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 634590-94-8)  Metherlands. OELs (binding) Components  Acetone (CAS 67-64-1)  Dipropylene glycol monomethyl ether (CAS 634590-94-8)  Norway. Administrative Norms for (CAS 634590-94-8)  Norway. Administrative Norms for (CAS 634590-94-8)  Acetone (CAS 67-64-1)  Dipropylene glycol	Type TWA  re Limit Values (L.N. 227. of  Type TWA TWA  Type  STEL TWA TWA TWA  TWA  TWA  TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TWA TWA  TOTAL TYPE TLV	value  1210 mg/m3 500 ppm  Occupational Health and Safety Authority Act (CAP. 42  Value  1210 mg/m3 500 ppm 308 mg/m3 500 ppm 308 mg/m3  50 ppm  Value  2420 mg/m3 1210 mg/m3 300 mg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3 1210 pg/m3

Poland. MACs. Minister of Working Environment	f Labour and Social Policy Regarding	g Maximum Allowable Concentrations and Intens	sities in
Components	Type	Value	

Components	Туре	Value
Acetone (CAS 67-64-1)	STEL	1800 mg/m3
	TWA	600 mg/m3
Dipropylene glycol monomethyl ether (CAS	STEL	480 mg/m3
34590-94-8)	T144A	242
	TWA	240 mg/m3
Portugal. OELs. Decree-Law n. 2 Components	90/2001 (Journal of the Repub Type	lic - 1 Series A, n.266) Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Dipropylene glycol nonomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
Portugal. VLEs. Norm on occupa	ational evaceure to chemical a	50 ppm
Components	Type	Value
Acetone (CAS 67-64-1)	STEL	750 ppm
,	TWA	500 ppm
Dipropylene glycol	STEL	150 ppm
monomethyl ether (CAS 34590-94-8)		
,	TWA	100 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 3052-41-3)	TWA	100 ppm
Romania. OELs. Protection of wo	orkers from exposure to chemi Type	ical agents at the workplace Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	500 mg/m3
		3 ppm
	TWA	300 mg/m3
		18 ppm
Mineral Spirits Regular Stoddard Solvent (CAS	STEL	1000 mg/m3
8052-41-3)	TWA	700 mg/m3
Slovakia. OELs. Regulation No. 3	300/2007 concerning protection	n of health in work with chemical agents
Components	Туре	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm
Dipropylene glycol	TWA	308 mg/m3
monomethyl ether (CAS 34590-94-8)	TWA	300 mg/m3
		50 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	600 mg/m3
•		100 ppm
	TWA	300 mg/m3
		50 ppm
Slovenia. OELs. Regulations cor (Official Gazette of the Republic		against risks due to exposure to chemicals while working
Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3

Components	Туре	Value	
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3	

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

Components	Туре	Value	
		50 ppm	
pain. Occupational Exposure L	imits		
Components	Туре	Value	
acetone (CAS 67-64-1)	TWA	1210 mg/m3	
,		500 ppm	
Dipropylene glycol	TWA	308 mg/m3	
nonomethyl ether (CAS 34590-94-8)			
4000 04 0)		50 ppm	
sweden. Occupational Exposure	Limit Values		
Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	1200 mg/m3	
	0.22	500 ppm	
	TWA	600 mg/m3	
	IVVA		
Dinranylana alyasi	etei.	250 ppm	
Dipropylene glycol monomethyl ether (CAS	STEL	450 mg/m3	
34590-94-8)			
,		75 ppm	
	TWA	300 mg/m3	
		50 ppm	
Switzerland. SUVA Grenzwerte a	m Arheitenlatz		
Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	2400 mg/m3	
	0.22	1000 ppm	
	TWA	1200 mg/m3	
	IWA	500 ppm	
Dipropulopo alvool	STEL	·	
Dipropylene glycol nonomethyl ether (CAS	SIEL	300 mg/m3	
34590-94-8)		50 ppm	
	TWA	300 mg/m3	
	IWA	50 ppm	
IV FILAO Washinlana Firmaniya I	imite (MELe)	30 ррш	
JK. EH40 Workplace Exposure L Components	Type	Value	
•			
Acetone (CAS 67-64-1)	STEL	3620 mg/m3	
		1500 ppm	
	TWA	1210 mg/m3	
		500 ppm	
Dipropylene glycol monomethyl ether (CAS	TWA	308 mg/m3	
34590-94-8)		FO nnm	
		50 ppm	
		2000/39/EC, 2006/15/EC, 2009/161/EU	
Components	Туре	Value	
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	
		500 ppm	
Dipropylene glycol	TWA	308 mg/m3	
nonomethyl ether (CAS		•	
34590-94-8)		50 ppm	

# **Biological limit values**

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)

Components Value Determinant Specimen Sampling time

Acetone (CAS 67-64-1) 100 mg/l Acetone Urine \*

<sup>\* -</sup> For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time	
Acetone (CAS 67-64-1)	80 mg/l	Aceton	Urine	*	

<sup>\* -</sup> For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents. Annex 2

Acetone (CAS 67-64-1) 53,36 mg/g Acetone Creatinine in wrine 80 mg/l Acetone Urine *	Components	Value	Determinant	Specimen	Sampling time
80 mg/l Acetone Urine *	Acetone (CAS 67-64-1)	53,36 mg/g	Acetone		*
		80 mg/l	Acetone	Urine	*

<sup>\* -</sup> For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4						
Components	Value	Determinant	Specimen	Sampling time		
Acetone (CAS 67-64-1)	50 mg/l	Acetona	Urine	*		

<sup>\* -</sup> For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA) **Determinant** Components Value **Specimen** Sampling time Acetone (CAS 67-64-1) 80 mg/l Urine Aceton

Recommended monitoring

procedures

Follow standard monitoring procedures.

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

concentrations (PNECs)

**Exposure guidelines** 

**EU Exposure Limit Values: Skin designation** 

Dipropylene glycol monomethyl ether (CAS 34590-94-8) 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. Eye wash facilities and emergency shower must be available when handling this product.

# 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 Chemical resistant gloves are recommended.

- Other Wear suitable protective clothing.

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

Thermal hazards Not applicable.

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such Hygiene measures

as washing after handling the material 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 Aerosol **Form** Colour Red Odour Cherry

Not established **Odour threshold** 

<sup>\* -</sup> For sampling details, please see the source document.

pH Not applicable

Melting point/freezing point Not established

Initial boiling point and boiling 160 °C (320 °F)

range

Flash point < -17,0 °C (< 1,4 °F) Tag closed cup (dispensed liquid)

**Evaporation rate** 0,2 (BuAc = 1) Flammability (solid, gas) Flammable gas.

Upper/lower flammability or explosive limits

Flammability limit - lower

0,6 %

(%)

Flammability limit - upper 12,8 %

(%)

Vapour pressure 2,6 mm Hg @20 ℃

Vapour density 4,8 (Air = 1)

Relative density Not available.

Solubility(ies)

Solubility (water) 25 % in water
Solubility (other) Not available.

Partition coefficient Not established

(n-octanol/water)

Auto-ignition temperature> 230 °C (> 446 °F)Decomposition temperatureNot establishedViscosityNot establishedExplosive propertiesNot available.Oxidizing propertiesNot available.

9.2. Other information

**Specific gravity** 0,88 - 0,89 @20 ℃

VOC (Weight %) 50,7 % per US State and 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** Strong oxidising agents.

**10.6. Hazardous** No hazardous decomposition products are known.

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

**Ingestion** May cause discomfort if swallowed.

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

**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

Symptoms Irritating to eyes, respiratory system and skin. Symptoms may include stinging, tearing, redness,

swelling, and blurred vision. Exposure may cause temporary irritation, redness, or discomfort. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

11.1. Information on toxicological effects

Acute toxicity Narcotic effects.

Components	Species	Test results
Acetone (CAS 67-64-1)		
Acute		
Dermal	B.11.9	45000 #
LD50	Rabbit	> 15800 mg/kg
		20 ml/kg
Inhalation	Б.,	FF700
LC50	Rat	55700 ppm
		76 mg/l, 4 Hours
		50,1 mg/l
		50,1 mg/l, 8 Hours
Oral L DE 0	Maria	0000
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
		2,2 ml/kg
Other		4007
LD50	Mouse	1297 mg/kg
	Rat	5500 mg/kg
Calcium Sulfonate (CAS 617	789-86-4)	
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
LDSU		
	Rat	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 1,9 mg/l
Oral Oral	riai	> 1,9 mg/i
LD50	Rat	> 2000 mg/kg
Dipropylene glycol monomet		2 2000 mg/ng
Acute	iny enter (0/10 04000 04 0)	
Dermal		
LD50	Rabbit	10 ml/kg
		9,5 g/kg
	Rat	> 19020 mg/kg
		> 20 ml/kg
Inhalation		5
LC50	Rat	> 275 ppm
Oral		
LD50	Dog	7,5 ml/kg
	Rat	> 5000 mg/kg
		5,4 ml/kg
Distillates Petroleum Hydrotr	reated Heavy (CAS 64742-54-7)	·
Acute	,	
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 2,5 mg/l
Oral		
LD50	Rat	> 2000 mg/kg
	reated Light (CAS 64742-47-8)	
Acute		
Dermal	Dobb <sup>:</sup>	. 2000
LD50	Rabbit	> 2000 mg/kg

Components	Species	<b>;</b>	Test results
Inhalation			
LC50	Cat		> 6,4 mg/l
	Rat		> 0,1 mg/l
Oral			
LD50	Rat		> 5000 mg/kg
Petrolatum (CAS 8009-03-8)			
Acute			
Dermal			
LD50	Rabbit		> 2000 mg/kg
	Rat		> 2000 mg/kg
Oral			
LD50	Rat		> 5000 mg/kg
Petroleum Gases, Liquefied, Swe	etened (CAS	6 68476-86-8)	
Acute			
Inhalation			
LC100	Cat		90 %
LC50	Mouse		1237 mg/l
			52,04 %
	Rat		> 13023 ppm
			1355 mg/l
Skin corrosion/irritation	Causes sk	in irritation.	
Serious eye damage/eye		erious eye irritation.	
irritation		mode e, e manem	
Respiratory sensitisation	Not a respiratory sensitizer.		
Skin sensitisation	This product is not expected to cause skin sensitisation.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	This produ	act is not considered to be a carcinogen	by IARC, ACGIH, NTP, or OSHA.
ACGIH Carcinogens			
Acetone (CAS 67-64-1)	Not classifiable as a human carcinogen. A4		a human carcinogen. A4
Reproductive toxicity	Based on	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - single exposure	Narcotic effects.		
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.		are not met.
Aspiration hazard	Not likely,	due to the form of the product.	
Mixture versus substance information	No informa	ation available.	
Other information	Not availa	ble.	
SECTION 12: Ecological i	nformatio	n	
12.1. Toxicity	Ecological	injuries are not known or expected under	er normal use.
Components		Species	Test results
Acetone (CAS 67-64-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
Distillates Petroleum Hydrotreate	d Light (CAS	64742-47-8)	
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout	2,9 mg/l, 96 hours

(Oncorhynchus mykiss)

Not inherently biodegradable.

**12.3. Bioaccumulative potential** Not available.

12.2. Persistence and

degradability

Partition coefficient n-octanol/water (log Kow)

LPS® HardCoat (Aerosol) > 1
Acetone -0,24
Mineral Spirits Regular Stoddard Solvent 3,16 - 7,15

Bioconcentration factor (BCF) Not available.

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

**12.5. Results of PBT**Not a PBT or vPvB substance or mixture.

and vPvB assessment

Not a PBT or VPVB substance or mixture.

**12.6. Other adverse effects** None known.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

**Contaminated packaging** 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. 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

ΙΔΤΔ

UN1950 14.1. UN number

Aerosols, flammable 14.2. UN proper shipping

name

14.3. Transport hazard class(es) 2.1 Subsidiary risk

14.4. Packing group Not applicable.

14.5. Environmental hazards No **ERG Code** 

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Cargo aircraft only

aircraft

Allowed. Allowed.

**IMDG** 

UN1950 14.1. UN number 14.2. UN proper shipping **AEROSOLS** 

name

14.3. Transport hazard class(es) 2 Class

Subsidiary risk Not applicable.

14.4. Packing group 14.5. Environmental hazards

Marine pollutant Nο F-D. S-U **EmS** 

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

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

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

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

Acetone (CAS 67-64-1)

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

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

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 Heavy (CAS 64742-54-7)

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

# 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

Acetone (CAS 67-64-1)

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

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

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

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

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

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

R11 Highly flammable. R12 Extremely flammable.

R23 Toxic by inhalation. R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R45 May cause cancer.

R46 May cause heritable genetic damage.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

Material name: LPS® HardCoat (Aerosol) - LPS Laboratories (EU) 03316, M03316 Version No.: 01 Issue date: 18-July-2014

R67 Vapours may cause drowsiness and dizziness.

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H350 May cause cancer.

Revision information

**Training information** 

Disclaimer

None.

Follow training instructions when handling this material.

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.

Material name: LPS® HardCoat (Aerosol) - LPS Laboratories (EU) 03316, M03316 Version No.: 01 Issue date: 18-July-2014

# SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

LPS® HardCoat

Registration number

of the mixture

**Synonyms** None.

**Part Number** M03328, M03305, M03355

02-July-2014 Issue date

Version number

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

A corrosion inhibitor designed to displace water and penetrate to form a barrier against moisture, **Identified uses** 

air, acids, alkali fumes and other corrosive elements on metal parts.

Uses advised against

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

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

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 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 R10, Xn;R65, Xi;R36/38, R43-67

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 liquids H226 - Flammable liquid and Category 3

vapour.

**Health hazards** 

Skin corrosion/irritation H315 - Causes skin irritation. Category 2 Serious eye damage/eye irritation

Category 2

H319 - Causes serious eye irritation.

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.

H304 - May be fatal if swallowed Aspiration hazard Category 1

and enters airways.

**Hazard summary** 

Physical hazards Flammable.

Health hazards Irritating to eyes and skin. May cause sensitisation by skin contact. Harmful: may cause lung

damage if swallowed. Vapours may cause drowsiness and dizziness. Occupational exposure to

the substance or mixture may cause adverse health effects.

**Environmental hazards** Not classified for hazards to the environment.

Material name: LPS® HardCoat - LPS Laboratories (EU) M03328, M03305, M03355 Version No.: 01 Issue date: 02-July-2014 Specific hazards Flammable. Do not breathe gas, fumes, or vapour. Harmful: may cause lung damage if

swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact.

Main symptoms Dermatitis. Rash. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin

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

### 2.2. Label elements

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

Calcium Sulfonate, Dipropylene glycol monomethyl ether, Distillates Petroleum Hydrotreated Contains:

Heavy, Distillates Petroleum Hydrotreated Light, Mineral Spirits Regular Stoddard Solvent,

Petrolatum

Hazard pictograms



Signal word Danger

**Hazard statements** 

Flammable liquid and vapour. H226

May be fatal if swallowed and enters airways. H304

Causes skin irritation. H315

May cause an allergic skin reaction. H317 Causes serious eye irritation. H319 May cause drowsiness or dizziness. H336

# **Precautionary statements**

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P210

Keep container tightly closed. P233

Ground/bond container and receiving equipment. P240

Use explosion-proof electrical/ventilating/lighting equipment. P241

Use only non-sparking tools. P242

Take precautionary measures against static discharge. P243

Avoid breathing mist or vapour. P261 Wash thoroughly after handling. P264

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

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

Wear protective gloves/eye protection/face protection. P280

Response

In case of fire: Use appropriate media for extinction. P370 + P378

IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. P301 + P310

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with P303 + P361 + P353

water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P304 + P340 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present P305 + P351 + P338

and easy to do. Continue rinsing. Call a POISON CENTRE or doctor/physician if you feel unwell. P312

Specific treatment (see this label). P321

Do NOT induce vomiting. P331

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. P337 + P313 Take off contaminated clothing and wash before reuse. P362

Storage

Keep cool. P235

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

Store locked up. P405

Disposal

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

Supplemental label information None. None known. 2.3. Other hazards

# **SECTION 3: Composition/information on ingredients**

# 3.2 Mixtures

M03328, M03305, M03355 Version No.: 01 Issue date: 02-July-2014

## **General information**

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Distillates Petroleum Hydrotreated Light		ed 30 - 40	64742-47-8 265-149-8	-	649-422-00-2	
Classification:	DSD:	Xn;R65				
	CLP:	Flam. Liq. 3;H2	26, Asp. Tox. 1;H304,	, Skin Irrit. 2;H315, STOT S	E 3;H336	
Mineral Spirits Regular S Solvent	Stoddard	10 - 20	8052-41-3 232-489-3	-	649-345-00-4	
Classification:	DSD:	Xn;R65				Р
	CLP:	Flam. Liq. 3;H2	26, Asp. Tox. 1;H304			Р
Distillates Petroleum Hyd Heavy	drotreate	ed 5 - 10	64742-54-7 265-157-1	-	649-467-00-8	
Classification:	DSD:	-				L
	CLP:	Carc. 1B;H350				L
Petrolatum		5 - 10	8009-03-8 232-373-2	-	649-254-00-X	
Classification:	DSD:	-				Ν
	CLP:	Carc. 1B;H350				N
Calcium Sulfonate		1 - 5	61789-86-4 263-093-9	-	-	
Classification:	DSD:	T;R23				
	CLP:	Skin Sens. 1B;	H317			
Dipropylene glycol mono	methyl e	ether 1 - 5	34590-94-8 252-104-2	-	-	#
Classification:	DSD:	-				
		Eye Irrit. 2;H319				

CLP: Regulation No. 1272/2008.

Note L: This component has been tested by Supplier. According to Supplier, the component complies with the criteria of Note L in Annex I of 67/548/EEC, and is exempt from a classification of T; R45. (Contains less than 3% DMSO)

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.

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 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.

DSD: Directive 67/548/EEC. M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

<sup>#:</sup> This substance has been assigned Community workplace exposure limit(s).

Eye contact

Ingestion

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.

are reversible if exposure is stopped.

Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconsious 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

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

# **SECTION 5: Firefighting measures**

General fire hazards Flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Alcohol resistant foam. Water spray. Water fog. Dry chemical powder. Dry chemicals. Carbon

5.3. Advice for firefighters Special protective equipment for firefighters

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

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. 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.

Specific methods

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

# **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapours or mists. 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. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil etc) away from spilled material.

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. Use water spray to reduce vapours or divert vapour cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

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

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# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Vapours may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapour. 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. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.

# 7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat and sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Value

7.3. Specific end use(s)

Not available.

Type

# **SECTION 8: Exposure controls/personal protection**

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

# 8.1. Control parameters

Components

# Occupational exposure limits

Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Ceiling	614 mg/m3
3.555 5. 5,		100 ppm
	MAK	307 mg/m3
		50 ppm
Belgium. Exposure Limit Values.		
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
		50 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	533 mg/m3
		100 ppm
	-	nst risks of exposure to chemical agents at work
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
,		50 ppm
Croatia. Dangerous Substance Expos Components	sure Limit Values in the Wo Type	rkplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09 Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	MAC	308 mg/m3
0.000 0.00		50 ppm
Czech Republic. OELs. Government	Decree 361	
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	Ceiling	550 mg/m3
0.000 0.00	TWA	270 mg/m3
Denmark. Exposure Limit Values		
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS	TLV	309 mg/m3
34590-94-8)		
		50 ppm

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Components	Туре	Value
		25 ppm

Estonia. OELs. Occupational Expo	sure Limits of Hazardous Su	ubstances. (Annex of Regulation No. 293 of 18 September
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	50 ppm 600 mg/m3
0032-41-3)	TWA	100 ppm 300 mg/m3 50 ppm
Finland. Workplace Exposure Limit Components	its Type	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	310 mg/m3
,		50 ppm
France. Threshold Limit Values (V Components	LEP) for Occupational Expos Type	sure to Chemicals in France, INRS ED 984 Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	VME	308 mg/m3
		50 ppm
Germany. DFG MAK List (advisory in the Work Area (DFG)	OELs). Commission for the	Investigation of Health Hazards of Chemical Compounds
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	310 mg/m3
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	50 ppm 140 mg/m3
		20 ppm
Germany. TRGS 900, Limit Values Components	in the Ambient Air at the Wo Type	rkplace Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	AGW	310 mg/m3
3+330-3+-0)		50 ppm
Greece. OELs (Decree No. 90/1999	. as amended)	••
Components	Type	Value
Dipropylene glycol monomethyl ether (CAS	STEL	900 mg/m3
34590-94-8)	TWA	150 ppm 600 mg/m3 100 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	720 mg/m3
•,	TWA	125 ppm 575 mg/m3 100 ppm

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Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	308 mg/m3
34330 34 0)	TWA	308 mg/m3
celand. OELs. Regulation 154/1999 Components	on occupational exposure l Type	imits Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	300 mg/m3
Mineral Spirits Regular Stoddard Solvent (CAS 3052-41-3)	TWA	50 ppm 145 mg/m3
	_	25 ppm
reland. Occupational Exposure Lim Components	its Type	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
Mineral Spirits Regular Stoddard Solvent (CAS	TWA	50 ppm 573 mg/m3
8052-41-3)		100 ppm
Italy. Occupational Exposure Limits Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	50 ppm 100 ppm
Latvia. OELs. Occupational exposur Components	_	ubstances in work environment Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
34330 34 0)		50 ppm
Lithuania. OELs. Limit Values for Cl Components	nemical Substances, Gener Type	al Requirements Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	450 mg/m3
,	TWA	75 ppm 300 mg/m3 50 ppm
Schedules I and V)	·	Occupational Health and Safety Authority Act (CAP. 424
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
		50 ppm
Netherlands. OELs (binding) Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS	TWA	300 mg/m3

Norway. Administrative Norms fo Components	Туре	Value
Dipropylene glycol nonomethyl ether (CAS 4590-94-8)	TLV	300 mg/m3
,		50 ppm
Vorking Environment	r and Social Policy Regarding	Maximum Allowable Concentrations and Intensities in
Components	Туре	Value
Dipropylene glycol nonomethyl ether (CAS 14590-94-8)	STEL	480 mg/m3
· · · · · · · · · · · · · · · · · · ·	TWA	240 mg/m3
Portugal. OELs. Decree-Law n. 2 Components	-	lic - 1 Series A, n.266) Value
<u> </u>	Туре	
Dipropylene glycol nonomethyl ether (CAS 14590-94-8)	TWA	308 mg/m3
	Parada a sana a tanda atau sana	50 ppm
Portugal. VLEs. Norm on occupa Components	tional exposure to chemical a	gents (NP 1796) Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	150 ppm
7-330-34-0)	TWA	100 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm
Romania. OELs. Protection of wo Components	orkers from exposure to chemi Type	ical agents at the workplace Value
Dipropylene glycol	STEL	500 mg/m3
nonomethyl ether (CAS 84590-94-8)	OTEL	300 mg/mb
		3 ppm
	TWA	300 mg/m3
Mineral Spirits Regular	STEL	18 ppm 1000 mg/m3
Stoddard Solvent (CAS	OTEL	1000 mg/mb
3052-41-3)	TWA	700 mg/m3
Slovakia. OELs. Regulation No. 3 Components	300/2007 concerning protection Type	n of health in work with chemical agents Value
Dipropylene glycol monomethyl ether (CAS	TWA	308 mg/m3
34590-94-8)		
Mineral Spirits Regular	STEL	50 ppm 600 mg/m3
Stoddard Solvent (CAS 8052-41-3)	SIEL	600 mg/ms
	T14/A	100 ppm
	TWA	300 mg/m3 50 ppm
Slovenia. OELs. Regulations cor	cerning protection of workers	against risks due to exposure to chemicals while work
Official Gazette of the Republic	of Slovenia)	
Components	Туре	Value
	TWA	308 mg/m3
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	IWA	ooo mg/mo

50 ppm

Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
,		50 ppm
Sweden. Occupational Exp	osure Limit Values	
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	450 mg/m3
,		75 ppm
	TWA	300 mg/m3
		50 ppm
Switzerland. SUVA Grenzwe	erte am Arbeitsplatz	
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	STEL	300 mg/m3
·		50 ppm
	TWA	300 mg/m3
		50 ppm
UK. EH40 Workplace Expos	sure Limits (WELs)	
Components	Туре	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
0 1000 0 1 0)		50 ppm
FU. Indicative Exposure Lir	nit Values in Directives 91/322/FFC	2000/39/EC, 2006/15/EC, 2009/161/EU
Components	Type	Value
Dipropylene glycol monomethyl ether (CAS 34590-94-8)	TWA	308 mg/m3
,		50 ppm
ogical limit values	No biological exposure limits noted for the ingredient(s).	
ommended monitoring sedures	Follow standard monitoring procedu	
ved no-effect level (DNEL)	Not available.	
, ,	No. 2011	
dicted no effect	Not available.	

Pre concentrations (PNECs)

# **Exposure guidelines**

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

Dipropylene glycol monomethyl ether (CAS 34590-94-8) 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

Use personal protective equipment as required. Personal protection equipment should be chosen **General information** 

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). Eye wash fountain is recommended.

Skin protection

- Hand protection Chemical resistant gloves are recommended.

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

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

certified respirators.

Thermal hazards Not applicable.

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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** Viscous. Liquid.

Physical state Liquid. Liquid. **Form** Colour Dark brown. Odour Cherry

**Odour threshold** Not established Not applicable pН Not established Melting point/freezing point Initial boiling point and boiling 160 °C (320 °F)

range

42,0 °C (107,6 °F) Tag closed cup Flash point

**Evaporation rate** 0,2 BuAc Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not established

(%)

Flammability limit - upper

Not established

(%)

2,6 mm Hg @ 20 °C Vapour pressure

4.8 (Air = 1)Vapour density Relative density Not available.

Solubility(ies)

Not soluble in cold water Solubility (water)

Solubility (other) Not available. Not established Partition coefficient

(n-octanol/water)

> 230 °C (> 446 °F) **Auto-ignition temperature** Not established **Decomposition temperature** 

< 20,5 mm2/s @ 40 °C **Viscosity** 

**Explosive properties** Not available. Not available. Oxidizing properties

9.2. Other information

Percent volatile 50 - 60 %

Specific gravity 0,87 - 0,89 @ 20℃

VOC (Weight %) 51,4 % excluding compounds exempted by U.S. EPA

# **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 heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

Carbon oxides. 10.6. Hazardous

decomposition products

# **SECTION 11: Toxicological information**

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

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# Information on likely routes of exposure

**Ingestion** May be fatal if swallowed and enters airways.

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

**Skin contact** Causes skin irritation. May cause sensitisation by skin contact.

**Eye contact** Causes serious eye irritation.

**Symptoms** Skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Symptoms may

include stinging, tearing, redness, swelling, and blurred vision. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Narcosis. Behavioural changes. Decrease

in motor functions.

# 11.1. Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects. May cause an allergic skin

reaction.

_	reaction.	
Components	Species	Test results
Calcium Sulfonate (CAS 617	789-86-4)	
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
	Rat	> 2000 mg/kg
Inhalation		
LC50	Rat	> 1,9 mg/l
Oral		
LD50	Rat	> 2000 mg/kg
Dipropylene glycol monome	thyl ether (CAS 34590-94-8)	
Acute		
Dermal		
LD50	Rabbit	10 ml/kg
		9,5 g/kg
	Rat	> 19020 mg/kg
		> 20 ml/kg
Inhalation		7 20 m/ng
LC50	Rat	> 275 ppm
Oral		> 1/0 pp
LD50	Dog	7,5 ml/kg
LDOU	Rat	_
	nai	> 5000 mg/kg
		5,4 ml/kg
	reated Heavy (CAS 64742-54-7)	
Acute		
Dermal	D 113	0000 #
LD50	Rabbit	> 2000 mg/kg
Inhalation	Б.:	0.5
LC50	Rat	> 2,5 mg/l
Oral	Б.:	0000 #
LD50	Rat	> 2000 mg/kg
	reated Light (CAS 64742-47-8)	
Acute		
Dermal	<b>-</b>	
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Cat	> 6,4 mg/l
	Rat	> 0,1 mg/l
Oral		
LD50	Rat	> 5000 mg/kg

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Components Species Test results

Petrolatum (CAS 8009-03-8)

Acute

Dermal

LD50 Rabbit > 2000 mg/kgRat > 2000 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

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

**Skin sensitisation** May cause an allergic skin reaction.

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

mutagenic or genotoxic.

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

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

Specific target organ toxicity -

single exposure

Narcotic effects.

Specific target organ toxicity -

repeated exposure

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

**Aspiration hazard** May be fatal if swallowed and enters airways.

Mixture versus substance

information

No information available.

Other information Not available.

# **SECTION 12: Ecological information**

**12.1. Toxicity** The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

2,9 mg/l, 96 hours

Components Species Test results

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

Aquatic Fish

(Oncorhynchus mykis:

LC50

Rainbow trout, donaldson trout (Oncorhynchus mykiss)

12.2. Persistence and

degradability

Not inherently biodegradable.

**12.3. Bioaccumulative potential** No data available.

Partition coefficient n-octanol/water (log Kow)

Mineral Spirits Regular Stoddard Solvent 3,16 - 7,15

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** 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** 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.

**EU waste code**The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

**Disposal methods/information** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

**Special precautions** Dispose in accordance with all applicable regulations.

# **SECTION 14: Transport information**

**ADR** 

**14.1. UN number** UN1139

14.2. UN proper shipping COATING SOLUTION

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Hazard No. (ADR) 3Y
Tunnel restriction code D/E
14.4. Packing group III
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** UN1139

14.2. UN proper shipping COATING SOLUTION

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
14.4. Packing group III
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** UN1139

**14.2. UN proper shipping** Coating Solution

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
14.4. Packing group III
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 UN113914.2. UN proper shipping Coating solution

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk 
14.4. Packing group III

14.5. Environmental hazards No
ERG Code 3L

14.6. Special precautions

Read safety instructions, SDS and emergency procedures before handling.

for user

Other information

Passenger and cargo Allowed.

aircraft

Cargo aircraft only Allowed.

**IMDG** 

**14.1. UN number** UN1139

14.2. UN proper shipping COATING SOLUTION

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk 14.4. Packing group III
14.5. Environmental hazards
Marine pollutant No

EmS F-E, S-E

14.6. Special precautions

Read safety instructions, SDS and emergency procedures before handling.

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

for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

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 Heavy (CAS 64742-54-7)

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

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 Heavy (CAS 64742-54-7) Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3) Petrolatum (CAS 8009-03-8)

# 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 Heavy (CAS 64742-54-7) Distillates Petroleum Hydrotreated Light (CAS 64742-47-8) Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

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

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7) Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petrolatum (CAS 8009-03-8)

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**

Not available. List of abbreviations Not available. References

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.

R23 Toxic by inhalation.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.

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. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H350 May cause cancer.

**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.

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