SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	LPS® 3 (Aerosol)
Registration number	-
Synonyms	None.
Part Number	00316, M00316
Issue date	15-September-2015
Version number	05
Revision date	11-July-2017
Supersedes date	31-March-2017

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

Identified uses	A specialized soft-film spray coating designed to prevent rust and corrosion on steel, aluminum and other metals.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Classification	F+;R12, Xi;R36/38, R67

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	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

Hazard summary

Physical hazards	Extremely flammable.
Health hazards	Irritating to eyes and skin. 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.

Specific hazards Extremely flammable. Heating may cause an explosion. Do not breathe vapours, aerosols. Irritating to eyes and skin.

Main symptoms Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

2.2. Label elements

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

Contains: 1-butoxy-2-propanol, Acetone, Calcium carbonate, Carbon dioxide, Distillates Petroleum Hydrotreated Heavy, Distillates Petroleum Hydrotreated Light, Hydrodesulferized Heavy Petroleum Naptha

Hazard pictograms

Signal word Danger

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing gas.
P271	Use only outdoors or in a well-ventilated area.
P264	Wash thoroughly after handling.
P280	Wear protective gloves and eye/face protection.

Response

P330	Rinse mouth.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Storage

P233	Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

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

Supplemental label information None known.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Distillates Petroleum Hydrotreated Light	50 - 60	64742-47-8 265-149-8	-	649-422-00-2	
Classification: **DSD:** Xn;R65 **CLP:** Asp. Tox. 1;H304					
1-butoxy-2-propanol	1 - 10	5131-66-8 225-878-4	-	603-052-00-8	
Classification: **DSD:** Xi;R36/38 **CLP:** Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Irrit. 2;H319					

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Acetone		1 - 10	67-64-1 200-662-2	-	606-001-00-8	#
Classification:	**DSD:** F;R11, Xi;R36, R66-67					
	CLP: Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336					
Distillates Petroleum Hydrotreated Heavy		1 - 10	64742-54-7 265-157-1	-	649-467-00-8	
Classification:	**DSD:** -					L
	CLP: Carc. 1B;H350					L
Carbon dioxide		1 - 5	124-38-9 204-696-9	-	-	#
Classification:	**DSD:** -					
	CLP: -					
Calcium carbonate		0,1 - 1	471-34-1 207-439-9	-	-	
Classification:	**DSD:** -					
	CLP: -					
Hydrodesulferized Heavy Petroleum Naptha		0,1 - 1	64742-82-1 265-185-4	-	649-330-00-2	
Classification:	**DSD:** Carc. Cat. 2;R45, Muta. Cat. 2;R46, Xn;R65-48/20					P
	CLP: Acute Tox. 4;H312, Muta. 1B;H340, Carc. 1B;H350, STOT RE 1;H372					P

List of abbreviations and symbols that may be used above

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 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) All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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

SECTION 4: First aid measures

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTRE or doctor/physician if you feel unwell.

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

Eye contact Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an 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 are reversible if exposure is stopped.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Extremely flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media	Powder. Alcohol resistant foam. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread 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	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Water runoff can cause environmental damage.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. 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 personal protective equipment. Do not touch or walk through spilled material. Avoid breathing gas. 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 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	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. The product is immiscible with water and will spread on the water surface. Stop leak if you can do so without risk. Isolate area until gas has dispersed. Collect spillage. Use water spray to reduce vapours or divert vapour cloud drift. Prevent product from entering drains. Following product recovery, flush area with water.
6.4. Reference to other sections	Use personal protection recommended in Section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not breathe gas. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
7.2. Conditions for safe storage, including any incompatibilities	Level 3 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store locked up. Store in a well-ventilated place.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

Components	Type	Value
Acetone (CAS 67-64-1)	MAK	1200 mg/m3 500 ppm
	STEL	4800 mg/m3 2000 ppm
Carbon dioxide (CAS 124-38-9)	Ceiling	18000 mg/m3

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

Components	Type	Value
		10000 ppm
	MAK	9000 mg/m3
		5000 ppm

Belgium. Exposure Limit Values.

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	STEL	54784 mg/m3
		30000 ppm
	TWA	9131 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	1400 mg/m3
	TWA	600 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	MAC	1210 mg/m3
		500 ppm
	STEL	3620 mg/m3
		1500 ppm
Carbon dioxide (CAS 124-38-9)	MAC	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3

Czech Republic. OELs. Government Decree 361

Components	Type	Value
1-butoxy-2-propanol (CAS 5131-66-8)	Ceiling	550 mg/m3
	TWA	270 mg/m3
Acetone (CAS 67-64-1)	Ceiling	1500 mg/m3
	TWA	800 mg/m3
Carbon dioxide (CAS 124-38-9)	Ceiling	45000 mg/m3
	TWA	9000 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
Acetone (CAS 67-64-1)	TLV	600 mg/m3
		250 ppm
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3

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

Components	Type	Value
		5000 ppm

Finland. Workplace Exposure Limits

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1500 mg/m3	
		630 ppm	
	TWA	1200 mg/m3	
		500 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Dust.
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3	
		5000 ppm	

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

Components	Type	Value
Acetone (CAS 67-64-1)	VLE	2420 mg/m3
		1000 ppm
	VME	1210 mg/m3
		500 ppm
Calcium carbonate (CAS 471-34-1)	VME	10 mg/m3
Carbon dioxide (CAS 124-38-9)	VME	9000 mg/m3
		5000 ppm

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

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1200 mg/m3	
		500 ppm	
Carbon dioxide (CAS 124-38-9)	TWA	9100 mg/m3	
		5000 ppm	
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m3	Respirable aerosol fraction
		350 mg/m3	Vapor.
		50 ppm	Vapor.

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

Components	Type	Value
Acetone (CAS 67-64-1)	AGW	1200 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	AGW	9100 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	3560 mg/m3
	TWA	1780 mg/m3
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		5000 ppm
	TWA	9000 mg/m3
		5000 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
	TWA	1210 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 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
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3
		15000 ppm
	TWA	9000 mg/m3
		5000 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Calcium carbonate (CAS 471-34-1)	TWA	6 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)	STEL	300 mg/m3
	TWA	200 mg/m3

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

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

Netherlands. OELs (binding)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
	TWA	1210 mg/m3
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Acetone (CAS 67-64-1)	TLV	295 mg/m3
		125 ppm
Carbon dioxide (CAS 124-38-9)	TLV	9000 mg/m3
		5000 ppm

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

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1800 mg/m3	
	TWA	600 mg/m3	
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Inhalable fraction.
Carbon dioxide (CAS 124-38-9)	STEL	27000 mg/m3	
	TWA	9000 mg/m3	

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3
		5000 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9150 mg/m3 5000 ppm
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)	STEL	580 mg/m3 100 ppm
	TWA	290 mg/m3 50 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	1200 mg/m3 500 ppm
	TWA	600 mg/m3 250 ppm
Carbon dioxide (CAS 124-38-9)	STEL	18000 mg/m3 10000 ppm
	TWA	9000 mg/m3 5000 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	2400 mg/m3 1000 ppm	
	TWA	1200 mg/m3 500 ppm	
Calcium carbonate (CAS 471-34-1)	TWA	3 mg/m3	Respirable dust.
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3 5000 ppm	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	3620 mg/m3 1500 ppm
	TWA	1210 mg/m3 500 ppm
Carbon dioxide (CAS 124-38-9)	STEL	27400 mg/m3 15000 ppm
	TWA	9150 mg/m3 5000 ppm

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm
Carbon dioxide (CAS 124-38-9)	TWA	9000 mg/m3 5000 ppm

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	20 mg/g	Acetone	Creatinine in urine	*
	20 mg/l	Acetone	Blood	*
	0,34 mmol/l	Acetone	Blood	*

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling time
	38,95 mmol/mol	Acetone	Creatinine in urine	*

* - For sampling details, please see the source document.

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	Acétone	Urine	*

* - 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	*

* - 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

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

* - 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	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

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

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Use personal protective equipment as required.

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

Skin protection

- Hand protection Chemical resistant gloves are recommended.

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

Respiratory protection No personal respiratory protective equipment normally required. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards Not applicable.

Hygiene measures When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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	Cloudy. Liquid.
Physical state	Gas.
Form	Aerosol
Colour	Brown.
Odour	Mild. Cherry.
Odour threshold	Not available.
pH	Not applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	18,0 °C (64,4 °F) Tag closed cup
Evaporation rate	151 (Ethyl Ether)
Flammability (solid, gas)	Flammable gas.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0,6 %
Flammability limit - upper (%)	6 %
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	230 °C (446 °F)
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	
Density	7,28 lb/gal
Percent volatile	63 - 82 %
Specific gravity	0,87
VOC	62,8 % per U.S State and Federal Consumer Product Regulations.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	May cause drowsiness and dizziness.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

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

11.1. Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test results
1-butoxy-2-propanol (CAS 5131-66-8)		
Acute		
Dermal		
LD50	Rabbit	1400 mg/kg, 24 Hours
Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)		
Acute		
Inhalation		
LC50	Rat	> 3,9 mg/l, 4 Hours
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

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 product 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

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)

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 Not classified.

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

Mixture versus substance information Not available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Not expected to be harmful to aquatic organisms.

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
Calcium carbonate (CAS 471-34-1)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/l, 96 hours
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2,9 mg/l, 96 hours

12.2. Persistence and degradability	Not inherently biodegradable.
12.3. Bioaccumulative potential	No data available for this product.
Partition coefficient n-octanol/water (log Kow)	
Acetone	-0,24
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not available.
12.6. Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	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. This material and its container must be disposed of as hazardous waste. 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.

SECTION 14: Transport information

ADR

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

RID

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

ADN

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
14.4. Packing group	Not available.

14.5. Environmental hazards No.

14.6. Special precautions for user Not available.

IATA

14.1. UN number UN1950

14.2. UN proper shipping name Aerosols, flammable

14.3. Transport hazard class(es)

Class 2.1

Subsidiary risk -

Label(s) 2.1

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions for user Not available.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1950

14.2. UN proper shipping name Aerosols, flammable

14.3. Transport hazard class(es)

Class 2.1

Subsidiary risk -

Label(s) 2.1

14.4. Packing group Not available.

14.5. Environmental hazards

Marine pollutant No

EmS Not available.

14.6. Special precautions for user Not available.

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

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 and II, as amended

Not listed.

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

Not listed.

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

Not listed.

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

Not listed.

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

Not listed.

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

Not listed.

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

Not listed.

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

Not listed.

Authorisations

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

Not listed.

Restrictions on use

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

Acetone (CAS 67-64-1)
Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)

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

Distillates Petroleum Hydrotreated Heavy (CAS 64742-54-7)
Hydrodesulferized Heavy Petroleum Naptha (CAS 64742-82-1)

Other EU regulations

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

Acetone (CAS 67-64-1)

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 EU Directive 94/33/EC on the protection of young people at work.
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. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R45 May cause cancer. R46 May cause heritable genetic damage. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness. H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H340 May cause genetic defects. H350 May cause cancer. H372 Causes damage to organs through prolonged or repeated exposure.
Revision information	SECTION 2: Hazards identification: Hazard statements SECTION 2: Hazards identification: Prevention SECTION 2: Hazards identification: Response SECTION 2: Hazards identification: Storage Composition / Information on Ingredients: Disclosure Overrides Regulatory Information: Risk Phrases - Labeling GHS: Classification
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.