PROBRANDS

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

LPS® CFC Free (Bulk)

of the mixture

Registration number

Synonyms None.

Part Number M03115, M03105, M03155 Issue date 15-September-2017

Version number 02

Revision date 30-January-2018 **Supersedes date** 15-September-2017

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

Identified uses A fast drying industrial cleaning solvent designed to remove soil and other contaminants.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier Alsco Ltd

Company name Unite 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

e-mail

Company name Rocol

Address Rocol House

Swillington Leeds LS26 8BS United Kingdom

Tel: +44 (0) 113 232 2700 Fax: +44 (0) 113 232 2740 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;R11, Xn;R65, Xi;R36, R67, N;R51/53

The full text for all R-phrases is displayed in section 16.

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

Physical hazards

Flammable liquids Category 2 H225 - Highly flammable liquid and

vapour.

Health hazards

exposure

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

dizziness.

Aspiration hazard Category 1 H304 - May be fatal if swallowed

and enters airways.

Material name: LPS® CFC Free (Bulk) - ITW Pro Brands (Rocol EU)

M03115, M03105, M03155 Version #: 02 Revision date: 30-January-2018 Issue date: 15-September-2017

Environmental hazards

Hazardous to the aquatic environment,

long-term aquatic hazard

Category 2

H411 - Toxic to aquatic life with long lasting effects.

Hazard summary

Physical hazards Highly flammable.

Health hazards Irritating to eyes. 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 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Specific hazards None known.

Main symptoms Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness.

Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision.

2.2. Label elements

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

Isohexane, Isopropanol Contains:

Hazard pictograms



Signal word Danger

Hazard statements

Highly flammable liquid and vapour. H225

May be fatal if swallowed and enters airways. H304

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

Toxic to aquatic life with long lasting effects. H411

Precautionary statements

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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

Avoid release to the environment. P273

Wear protective gloves/eye protection/face protection. P280

Response

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

Do NOT induce vomiting. P331

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

water/shower.

IF INHALED: Remove person to fresh air and keep 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/doctor if you feel unwell. P312 If eye irritation persists: Get medical advice/attention. P337 + P313 In case of fire: Use appropriate media to extinguish. P370 + P378

Collect spillage. P391

Storage

P235 Keep cool.

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 known.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

Material name: LPS® CFC Free (Bulk) - ITW Pro Brands (Rocol EU)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Isohexane		90 - 100	-	-	-	
			931-254-9			
Classification:	DSD:	-				
	CLP:	Flam. Liq. 2;H2	25, Asp. Tox. 1;H304	I, STOT SE 3;H336, Aquatic	;	
		Chronic 2;H411				
Isopropanol		1 - 10	67-63-0 200-661-7	-	603-117-00-0	
Isopropanol Classification:	DSD:		67-63-0 200-661-7	<u>-</u>	603-117-00-0	

List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC. CLP: Regulation No. 1272/2008.

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

M: M-factor

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

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

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

SECTION 4: First aid measures

General information Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the

material(s) involved, and take precautions to protect themselves. Wash contaminated clothing

before reuse.

4.1. Description of first aid measures

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

CENTRE or doctor/physician if you feel unwell.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical Skin contact

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. Rinse mouth. Do not induce vomiting. If Ingestion

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

4.3. Indication of any immediate medical attention and special treatment needed Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision.

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Highly flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing

media

Water fog. Alcohol resistant foam. Dry chemical powder. 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

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.

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.

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

Material name: LPS® CFC Free (Bulk) - ITW Pro Brands (Rocol EU)

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. 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.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

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

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. 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

Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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. Explosion-proof general and local exhaust ventilation. 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. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

1225 mg/m3

980 mg/m3

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Isopropanol (CAS 67-63-0)

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

Components	Туре	Value
Isopropanol (CAS 67-63-0)	MAK	500 mg/m3
		200 ppm
	STEL	2000 mg/m3
		800 ppm
Belgium. Exposure Limit Values.		
Components	Туре	Value
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm
Bulgaria. OELs. Regulation No 13	on protection of workers aga	inst risks of exposure to chemical agents at work
Components	Type	Value

STEL

TWA

convenend (CAC C7 CC C)	MAC	000 mg/0
sopropanol (CAS 67-63-0)	MAC	999 mg/m3
	STEL	400 ppm 1250 mg/m3
	SILL	500 ppm
Cyprus OFLs Control of factory at	mosphere and dangerous su	ibstances in factories regulation, PI 311/73, as amende
Components	Type	Value
sopropanol (CAS 67-63-0)	TWA	980 mg/m3
		400 ppm
Czech Republic. OELs. Governmer		
Components	Туре	Value
sopropanol (CAS 67-63-0)	Ceiling	1000 mg/m3
	TWA	500 mg/m3
Denmark. Exposure Limit Values	_	
Components	Туре	Value
sopropanol (CAS 67-63-0)	TLV	490 mg/m3
		200 ppm
Estonia. OELs. Occupational Expo	sure Limits of Hazardous Su	bstances. (Annex of Regulation No. 293 of 18 September
Components	Туре	Value
sopropanol (CAS 67-63-0)	STEL	600 mg/m3
, , , ,		250 ppm
	TWA	350 mg/m3
		150 ppm
inland. Workplace Exposure Limi	is	
Components	Туре	Value
sopropanol (CAS 67-63-0)	STEL	620 mg/m3
,		250 ppm
	TWA	500 mg/m3
		200 ppm
rance. Threshold Limit Values (VI	EP) for Occupational Expos	ure to Chemicals in France, INRS ED 984
Components	Туре	Value
sopropanol (CAS 67-63-0)	VLE	980 mg/m3
		400 ppm
Germany. DFG MAK List (advisory n the Work Area (DFG)	OELs). Commission for the I	nvestigation of Health Hazards of Chemical Compound
Components	Туре	Value
sopropanol (CAS 67-63-0)	TWA	500 mg/m3
		200 ppm
	n the Ambient Air at the Wer	
Germany, TRGS 900. Limit Values i	II LIIE AIIIDIEIII AII 41 IIIE VVIII	
- · · · · · · · · · · · · · · · · · · ·	Type	Value
Germany. TRGS 900, Limit Values i Components sopropanol (CAS 67-63-0)	Туре	Value
Components		-
Components sopropanol (CAS 67-63-0)	Type AGW	Value 500 mg/m3
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999)	Type AGW	Value 500 mg/m3
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components	Type AGW as amended)	Value 500 mg/m3 200 ppm Value
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components	Type AGW as amended) Type	Value 500 mg/m3 200 ppm Value 1225 mg/m3
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components	Type AGW as amended) Type STEL	Value 500 mg/m3 200 ppm Value 1225 mg/m3 500 ppm
Components	Type AGW as amended) Type	Value 500 mg/m3 200 ppm Value 1225 mg/m3
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components sopropanol (CAS 67-63-0)	Type AGW as amended) Type STEL TWA	Value 500 mg/m3 200 ppm Value 1225 mg/m3 500 ppm 980 mg/m3 400 ppm
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components sopropanol (CAS 67-63-0)	Type AGW as amended) Type STEL TWA	Value 500 mg/m3 200 ppm Value 1225 mg/m3 500 ppm 980 mg/m3 400 ppm
Components sopropanol (CAS 67-63-0) Greece. OELs (Decree No. 90/1999, Components	Type AGW as amended) Type STEL TWA nemical Safety of Workplaces	Value 500 mg/m3 200 ppm Value 1225 mg/m3 500 ppm 980 mg/m3 400 ppm

Components	Туре	Value
Isopropanol (CAS 67-63-0)	TWA	490 mg/m3 200 ppm
Ireland. Occupational Exposure Limits Components	Туре	Value
Isopropanol (CAS 67-63-0)	STEL TWA	400 ppm 200 ppm
Italy. Occupational Exposure Limits Components	Туре	Value
Isopropanol (CAS 67-63-0)	STEL TWA	400 ppm 200 ppm
Latvia. OELs. Occupational exposure l Components	imit values of chemical su Type	ubstances in work environment Value
Isopropanol (CAS 67-63-0)	STEL TWA	600 mg/m3 350 mg/m3
Lithuania. OELs. Limit Values for Che Components	mical Substances, Genera Type	al Requirements Value
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3 250 ppm 350 mg/m3
Norway. Administrative Norms for Con		150 ppm
Components	Туре	Value
Isopropanol (CAS 67-63-0)	TLV	245 mg/m3 100 ppm
Poland. MACs. Regulation regarding menvironment, Annex 1	naximum permissible con	centrations and intensities of harmful factors in the wo
Components	Туре	Value
Isopropanol (CAS 67-63-0)	STEL TWA	1200 mg/m3 900 mg/m3
Portugal. VLEs. Norm on occupational Components	exposure to chemical age Type	ents (NP 1796) Value
Isopropanol (CAS 67-63-0)	STEL TWA	400 ppm 200 ppm
Romania. OELs. Protection of workers Components	from exposure to chemic Type	• •
		value
Isopropanol (CAS 67-63-0)	STEL	500 mg/m3
Isopropanol (CAS 67-63-0) Slovakia. OELs. Regulation No. 300/20	STEL TWA 07 concerning protection	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents
Isopropanol (CAS 67-63-0) Slovakia. OELs. Regulation No. 300/20 Components	STEL TWA 07 concerning protection Type	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value
Isopropanol (CAS 67-63-0)	STEL TWA 07 concerning protection Type STEL	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm
Isopropanol (CAS 67-63-0) Slovakia. OELs. Regulation No. 300/20 Components Isopropanol (CAS 67-63-0)	STEL TWA 07 concerning protection Type STEL TWA	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm 500 mg/m3 200 ppm
Slovakia. OELs. Regulation No. 300/20 Components Isopropanol (CAS 67-63-0) Slovenia. OELs. Regulations concerning (Official Gazette of the Republic of Slovenia.	STEL TWA 07 concerning protection Type STEL TWA TWA ng protection of workers avenia)	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm 500 mg/m3 200 ppm
Slovakia. OELs. Regulation No. 300/20 Components Isopropanol (CAS 67-63-0) Slovenia. OELs. Regulations concerning (Official Gazette of the Republic of Slocomponents	STEL TWA 07 concerning protection Type STEL TWA ng protection of workers avenia) Type	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm 500 mg/m3 200 ppm against risks due to exposure to chemicals while working
Slovakia. OELs. Regulation No. 300/20 Components Isopropanol (CAS 67-63-0) Slovenia. OELs. Regulations concernii (Official Gazette of the Republic of Slo Components Isopropanol (CAS 67-63-0)	STEL TWA 07 concerning protection Type STEL TWA TWA ng protection of workers avenia)	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm 500 mg/m3 200 ppm
Slovakia. OELs. Regulation No. 300/20 Components Isopropanol (CAS 67-63-0) Slovenia. OELs. Regulations concerning (Official Gazette of the Republic of Slocomponents	STEL TWA 07 concerning protection Type STEL TWA ng protection of workers avenia) Type	500 mg/m3 203 ppm 200 mg/m3 81 ppm of health in work with chemical agents Value 1000 mg/m3 400 ppm 500 mg/m3 200 ppm against risks due to exposure to chemicals while working to the service of the se

Components	Туре	Value	
	TWA	500 mg/m3	
		200 ppm	
Sweden. OELs. Work Environmen	t Authority (AV), Occupationa	Il Exposure Limit Values (AFS 2015:7)	
Components	Туре	Value	
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3	
		250 ppm	
	TWA	350 mg/m3	
		150 ppm	
Switzerland. SUVA Grenzwerte am	n Arbeitsplatz		
Components	Туре	Value	
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3	
		400 ppm	
	TWA	500 mg/m3	
		200 ppm	
UK. EH40 Workplace Exposure Lir	mits (WELs)		
Components	Туре	Value	
Isopropanol (CAS 67-63-0)	STEL	1250 mg/m3	

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)					
Components	Value	Determinant	Specimen	Sampling time	
Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Urine	*	
	50 mg/l	Acetone	Blood	*	

500 ppm 999 mg/m3

400 ppm

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

Components	Value	Determinant	Specimen	Sampling time
Isopropanol (CAS 67-63-0)	25 mg/l	Aceton	Urine	*
	25 mg/l	Aceton	Blood	*

^{* -} 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	
Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*	

TWA

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

Components	Value	Determinant	Specimen	Sampling time
Isopropanol (CAS 67-63-0)	25 mg/l	Aceton	Urine	*
	25 mg/l	Aceton	Blood	*

^{* -} 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

Explosion-proof general and local exhaust ventilation. 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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

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

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

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

Eye/face protection

Chemical respirator with organic vapour cartridge and full facepiece.

Skin protection

Wear appropriate chemical resistant gloves. - Hand protection

- Other Wear suitable protective clothing.

Respiratory protection Chemical respirator with organic vapour cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures When using do not smoke. Always observe good personal hygiene measures, such as washing

after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

Environmental exposure

controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid. **Form** Liquid.

Colour Clear. Colourless. Hydrocarbon-like. Odour **Odour threshold** Not available. Not available. pН Melting point/freezing point Not available. 60,5 °C (140,9 °F) Initial boiling point and boiling

range

Flash point < -18,0 °C (< -0,4 °F) Tag closed cup

7 %

Evaporation rate < 1 (Ethyl Ether = 1) Not applicable. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

0.6 %

Flammability limit - upper

(%)

Vapour pressure 352,53 mm Hg @ 38°C

Vapour density \sim 3 (air = 1) Not available. Relative density

Solubility(ies)

< 10 % w/w Solubility (water)

Partition coefficient > 1

(n-octanol/water)

Auto-ignition temperature 306 °C (582,8 °F) **Decomposition temperature** Not available. < 3 cSt @ 25°C **Viscosity** Not explosive. **Explosive properties Oxidising properties** Not oxidising

9.2. Other information

Heat of combustion > 30 kJ/gPercent volatile 100 %

Specific gravity 0.64 - 0.67 @ 20°C

100 % per US State and Federal Consumer Product Regulations; 669 g/L per SCAQMD Rule 102

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.

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

flash point. Contact with incompatible materials.

10.5. Incompatible materials

Acids. Strong oxidising agents. Isocyanates. Chlorine.

10.6. Hazardous

decomposition products

10.4. Conditions to avoid

Carbon oxides.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

No adverse effects due to skin contact are expected. Skin contact

Eve contact Causes serious eye irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Aspiration may cause pulmonary oedema and pneumonitis. May cause drowsiness and dizziness. **Symptoms**

Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision.

11.1. Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Prolonged skin contact may cause temporary irritation. Skin corrosion/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.

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

mutagenic or genotoxic.

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

ACGIH Carcinogens

Isopropanol (CAS 67-63-0) 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)

Not listed.

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

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified

Aspiration hazard May be fatal if swallowed and enters airways.

Mixture versus substance

information

No information available.

Other information None known.

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects. Due to partial or complete lack of data the

classification for hazardous to the aquatic environment, acute hazard, is not possible.

Test results Components **Species**

Isopropanol (CAS 67-63-0)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours

12.2. Persistence and Expected to biodegrade.

degradability

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

LPS® CFC Free (Bulk) > 1 0.05 Isopropanol

Material name: LPS® CFC Free (Bulk) - ITW Pro Brands (Rocol EU)

M03115, M03105, M03155 Version #: 02 Revision date: 30-January-2018 Issue date: 15-September-2017

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil This product is slightly water soluble and may disperse in soil.

12.5. Results of PBT

and vPvB assessment

Not a PBT or vPvB substance or mixture.

12.6. Other adverse effectsThe product contains volatile organic compounds which have a photochemical ozone creation

potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

Disposal instructions).

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

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

EU waste codeThe 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 UN1993

14.2. UN proper shipping FLAMMABLE LIQUID, N.O.S. (Hexanes and Isopropanol)

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Hazard No. (ADR) 33
Tunnel restriction code D/E
14.4. Packing group ||
14.5. Environmental hazards No

14.6. Special precautions Not available.

for user

RID

14.1. UN number UN1993

14.2. UN proper shipping FLAMMABLE LIQUID, N.O.S. (Hexanes and Isopropanol)

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
14.4. Packing group ||
14.5. Environmental hazards No

14.6. Special precautions Not available.

for user

ADN

14.1. UN number UN1993

14.2. UN proper shipping Flammable liquid, n.o.s. (Hexanes and Isopropanol)

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
14.4. Packing group ||
14.5. Environmental hazards No

14.6. Special precautions Not available.

for user

IATA

14.1. UN number UN1993

14.2. UN proper shipping Flammable liquid, n.o.s. (Hexanes and Isopropanol)

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk 14.4. Packing group II
14.5. Environmental hazards No
ERG Code 3H

14.6. Special precautions Not available.

for user

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1993

14.2. UN proper shipping FLAMMABLE LIQUID, N.O.S. (Hexanes and Isopropanol), MARINE POLLUTANT

name

14.3. Transport hazard class(es)

Class 3
Subsidiary risk 14.4. Packing group ||
14.5. Environmental hazards
Marine pollutant Yes

EmS F-E, S-E

14.6. Special precautions Not available.

for user

14.7. Transport in bulk Not established.

according to Annex II of MARPOL 73/78 and the IBC

Code

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

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

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

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

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 Not listed.

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

Not listed.

Other EU regulations

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

Isopropanol (CAS 67-63-0)

Other regulations The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation

(EC) No 1907/2006, as amended.

National regulations Follow national regulation for work with chemical agents.

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.

R36 Irritating to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

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

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.

Revision information Product and Company Identification: Product and Company Identification

Training information Follow training instructions when handling this material.

Disclaimer

Rocol cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its

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 appointed in the text.

publication. The information given is designed only as a guidance for safe handling, use,

specified in the text.