


Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	1 di 13

Keep out of reach of children.

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	2 di 13

P210
P370+P378
P403+P235
P501

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
In case of fire: use carbon dioxide (CO₂) to extinguish.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance to current regulation.

Ingredients according to Regulation (EC) No. 648/2004

perfumes, Limonene

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
ETHANOL		
CAS 64-17-5	$25,5 \leq x < 27$	Flam. Liq. 2 H225, Eye Irrit. 2 H319 Eye Irrit. 2 H319: $\geq 50\%$
EC 200-578-6		
INDEX 603-002-00-5		
REACH Reg. 01-2119457610-43		
PROPAN-2-OL		
CAS 67-63-0	$1 \leq x < 1,5$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 200-661-7		
INDEX 603-117-00-0		
REACH Reg. 01-2119457558-25		
BUTANONE		
CAS 78-93-3	$0,15 \leq x < 0,2$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 201-159-0		
INDEX 606-002-00-3		
REACH Reg. 01-2119457290-43		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures


EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	3 di 13

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.


6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	4 di 13

use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well-ventilated place, away from direct sunlight. Store in a cool and well-ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

3

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία``»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	1000				
TLV	CZE	1000		3000		
AGW	DEU	960	500	1920	1000	
MAK	DEU	960	500	1920	1000	
TLV	DNK	1900	1000			
VLA	ESP			1910	1000	



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (UE) 878/2020

Board Code S-P4/2-2

Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	5 di 13

VLEP	FRA	1900	1000	9500	5000
TLV	GRC	1900	1000		
AK	HUN	1900		7600	
GVI/KGVI	HRV	1900	1000		
TGG	NLD	260		1900	SKIN
NDS/NDSch	POL	1900			
NPEL	SVK	960	500	1920	
WEL	GBR	1920	1000		
TLV-ACGIH				1884	1000

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,96	mg/l
Normal value in marine water	0,79	mg/l
Normal value for fresh water sediment	3,6	mg/kg
Normal value for marine water sediment	2,9	mg/kg
Normal value for water, intermittent release	2,75	mg/l
Normal value of STP microorganisms	580	mg/l
Normal value for the food chain (secondary poisoning)	0,38	mg/kg
Normal value for the terrestrial compartment	0,63	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				87 mg/kg bw/d				
Inhalation				114 mg/m3				950 mg/m3
Skin				206 mg/kg bw/d				343 mg/kg bw/d

PROPAN-2-OL

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV	BGR	980	1225	
TLV	CZE	500	1000	SKIN
AGW	DEU	500	200	1000 400
MAK	DEU	500	200	1000 400
TLV	DNK	490	200	
VLA	ESP	500	200	1000 400
VLEP	FRA		980	400
TLV	GRC	980	400	1225 500
AK	HUN	500		2000
GVI/KGVI	HRV	999	400	1250 500
TGG	NLD	650		
NDS/NDSch	POL	900		1200
NPEL	SVK	500	200	1000
MV	SVN	500	200	
WEL	GBR	999	400	1250 500
TLV-ACGIH		492	200	983 400

Predicted no-effect concentration - PNEC

Normal value in fresh water	140,9	mg/l
Normal value in marine water	140,9	mg/l
Normal value for fresh water sediment	552	mg/kg/d
Normal value for marine water sediment	552	mg/kg/d
Normal value for water, intermittent release	140,9	mg/l
Normal value of STP microorganisms	2251	mg/l
Normal value for the food chain (secondary poisoning)	160	mg/kg food
Normal value for the terrestrial compartment	28	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (UE) 878/2020

Board Code S-P4/2-2

Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	6 di 13

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				26 mg/kg bw/d				
Inhalation				89 mg/m3				500 mg/m3
Skin				319 mg/kg bw/d				888 mg/kg bw/d

BUTANONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	590		885		
TLV	CZE	600		900		
AGW	DEU	600	200	600	200	SKIN
MAK	DEU	600	200	600	200	SKIN
TLV	DNK	145	50			SKIN
VLA	ESP	600	200	900	300	
VLEP	FRA	600	200	900	300	SKIN
TLV	GRC	600	200	900	300	
AK	HUN	600		900		
GVI/KGVI	HRV	600	200	900	300	SKIN
VLEP	ITA	600	200	900	300	
VLE	PRT	600	200	900	300	
NDS/NDSch	POL	450		900		
NPEL	SVK	600	200	900		
WEL	GBR	600	200	899	300	SKIN
OEL	EU	600	200	900	300	
TLV-ACGIH		590	200	885	300	

Predicted no-effect concentration - PNEC

Normal value in fresh water	55,8	mg/l
Normal value in marine water	55,8	mg/l
Normal value for fresh water sediment	284,74	mg/kg
Normal value for marine water sediment	284,7	mg/kg
Normal value for water, intermittent release	55,8	mg/l
Normal value of STP microorganisms	709	mg/l
Normal value for the food chain (secondary poisoning)	1000	mg/kg
Normal value for the terrestrial compartment	22,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				31 mg/kg bw/d				
Inhalation				106 mg/m3				600 mg/m3
Skin				412 mg/kg bw/d				1161 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ;

MED = medium hazard ; HIGH = high hazard.


8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	7 di 13

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Melting point / freezing point	-114 °C	
Initial boiling point	78 °C	
Flammability	not available	
Lower explosive limit	2,5 % (v/v)	
Upper explosive limit	13,5 % (v/v)	
Flash point	13 °C	
Auto-ignition temperature	363 °C	
Decomposition temperature	not available	
pH	7	
Kinematic viscosity	not available	
Dynamic viscosity	0,6 - 1,5 mPa s	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	0,842 g/cm ³	
Relative vapour density	not available	
Particle characteristics	not applicable	


9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	27,39 % - 230,63 g/litre
Explosive properties	not classified as explosive, contains no explosive substances according to CLP Art. (14 (2))

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	8 di 13

Oxidising properties

the product is not an oxidizing substance

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

BUTANONE

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. Decomposes under the effect of heat.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ETHANOL

Risk of explosion on contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulphur monofluoride, acetic anhydride, acids, concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercury nitrate, nitric acid, silver, silver nitrate, ammonia, silver oxide, ammonia, strong oxidising agents, nitrogen dioxide. May react dangerously with: bromoacetylene, chlorine acetylene, bromine trifluoride, chromium trioxide, chromyl chloride, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, black platinum, zirconium (IV) chloride, zirconium (IV) iodide. Forms explosive mixtures with: air.

BUTANONE

May form peroxides with: air, light, strong oxidising agents. Risk of explosion on contact with: hydrogen peroxide, nitric acid, sulphuric acid. May react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ETHANOL

Avoid exposure to: sources of heat, naked flames.

BUTANONE

Avoid exposure to: sources of heat.

10.5. Incompatible materials

BUTANONE

Incompatible with: strong oxidants, inorganic acids, ammonia, copper, chloroform.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

Information not available


Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	9 di 13

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component)
ATE (Oral) of the mixture: Not classified (no significant component)
ATE (Dermal) of the mixture: Not classified (no significant component)

ETHANOL

LD50 (Oral): > 5000 mg/kg Rat
LC50 (Inhalation vapours): 120 mg/l/4h Pimephales promelas

PROPAN-2-OL

LD50 (Dermal): 16,4 ml/kg Rat
LD50 (Oral): 5840 mg/kg bw Rat
LC50 (Inhalation vapours): > 10000 ppm/6h Rat

BUTANONE

LD50 (Dermal): 6480 mg/kg Rabbit
LD50 (Oral): 2737 mg/kg Rat
LC50 (Inhalation vapours): 23,5 mg/l/8h Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class


11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	10 di 13

ETHANOL

LC50 - for Fish	14200 mg/l/96h
EC50 - for Crustacea	454 mg/l/48h
EC50 - for Algae / Aquatic Plants	275 mg/l/72h
Chronic NOEC for Fish	250 mg/l
Chronic NOEC for Crustacea	96 mg/l
Chronic NOEC for Algae / Aquatic Plants	11,5 mg/l

PROPAN-2-OL

LC50 - for Fish	8970 mg/l/96h <i>Leuciscus idus melanotus</i>
EC50 - for Crustacea	9714 mg/l/24h <i>Daphnia magna</i>

BUTANONE

LC50 - for Fish	1656 mg/l/72h
EC50 - for Algae / Aquatic Plants	1972 mg/l/72h

12.2. Persistence and degradability

ETHANOL

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

PROPAN-2-OL

Rapidly degradable

BUTANONE

Solubility in water	> 10000 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

ETHANOL

Partition coefficient: n-octanol/water	-0,35
--	-------

PROPAN-2-OL

Partition coefficient: n-octanol/water	0,05
--	------

BUTANONE

Partition coefficient: n-octanol/water	0,3
--	-----

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.


12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should

	<h1 style="text-align: center;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Reg. (UE) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
	Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by
57/20	22.08.2022	1	RLAB	DG	RLAB	11 di 13

be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1987

14.2. UN proper shipping name

ADR / RID: ALCOHOLS, N.O.S. (ethanol, isopropyl alcohol)

IMDG: ALCOHOLS, N.O.S. (ethanol, isopropyl alcohol)

IATA: ALCOHOLS, N.O.S. (ethanol, isopropyl alcohol)

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33

Limited
Quantities: 1
L

Tunnel
restriction
code: (D/E)

IMDG: Special provision: 640D
EMS: F-E, S-D

Limited
Quantities: 1
L

IATA: Cargo:

Maximum
quantity: 60 L

Packaging
instructions:
364
Packaging
instructions:
353

Pass.:

Maximum
quantity: 5 L

Special provision:


A3, A180

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

	<h1 style="text-align: center;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Reg. (UE) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
	Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by
57/20	22.08.2022	1	RLAB	DG	RLAB	Page 12 di 13

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40

Contained substance
Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Information not available

Regulation (EC) No. 648/2004
Ingredients according to Regulation (EC) No. 648/2004

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK 1: Low hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.


SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (UE) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
57/20	22.08.2022	1	RLAB	DG	RLAB	13 di 13

- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 15 / 16.