SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

1.2

ETRA PRO LASINPESU -25C

Other means of identification:

Non-applicable

Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses: Car windscreen washer

Uses advised against: All uses not specified in this section or in section 7.3

- 1.3 Details of the supplier of the safety data sheet: ESTKO NORDIC OY Huhtimontie 21 04200 Kerava - FINLAND Phone: (+358) 40 6865870 myynti@estkonordic.fi www.estkonordic.fi
- **1.4 Emergency telephone number:** 09 471 977

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Flam. Liq. 3: Flammable liquids, Category 3, H226

2.2 Label elements:

Warning

CLP Regulation (EC) No 1272/2008:



Hazard statements:

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed.
- P280: Wear protective gloves/protective clothing/eye protection/protective footwear.
- P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

Endocrine-disrupting properties: The product fails to meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Aqueous solution based on alcohols and surfactants.

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

ETRA PRO LASINPESU -25C

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

	Identification		Chemical name/Classification	Concentration
CAS:	64-17-5	ethanol ⁽¹⁾	Self-classified	
EC: Index: REACH	200-578-6 603-002-00-5 I: 01-2119457610-43- XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger	30 - <50 %
CAS: EC: Index: REACH:	107-21-1 203-473-3 603-027-00-1 : 01-2119456816-28- XXXX	Ethanediol ⁽²⁾	Self-classified	
		Regulation 1272/2008	Acute Tox. 4: H302; STOT RE 2: H373 - Warning	<1 %
CAS: EC:	78-93-3	Butanone ⁽²⁾	ATP CLP00	
Index:	201-159-0 606-002-00-3 : 01-2119457290-43- XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	<1 %

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

(2) Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
ethanol CAS: 64-17-5 EC: 200-578-6	% (w/w) >=50: Eye Irrit. 2 - H319

SECTION 4: FIRST AID MEASURES

4.1 **Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection. By eve contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 **Extinguishing media:**

Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2).

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

SECTION 5: FIREFIGHTING MEASURES (continued)

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

Technical measures for storage					
Maximum Temp.:	25 °C				
Maximum time:	36 Months				

ETRA PRO LASINPESU -25C

SECTION 7: HANDLING AND STORAGE (continued)

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
Ethanediol	IOELV (8h)	20 ppm	52 mg/m ³
CAS: 107-21-1 EC: 203-473-3	IOELV (STEL)	40 ppm	104 mg/m3
Butanone	IOELV (8h)	200 ppm	600 mg/m ³
CAS: 78-93-3 EC: 201-159-0	IOELV (STEL)	300 ppm	900 mg/m3

DNEL (Workers):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
ethanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 64-17-5	Dermal	Non-applicable	Non-applicable	343 mg/kg	Non-applicable
EC: 200-578-6	Inhalation	Non-applicable	Non-applicable	950 mg/m ³	Non-applicable
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	106 mg/kg	Non-applicable
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	35 mg/m ³
Butanone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 78-93-3	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
EC: 201-159-0	Inhalation	Non-applicable	Non-applicable	600 mg/m ³	Non-applicable

DNEL (General population):

		Short	Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local	
ethanol	Oral	Non-applicable	Non-applicable	87 mg/kg	Non-applicable	
CAS: 64-17-5	Dermal	Non-applicable	Non-applicable	206 mg/kg	Non-applicable	
EC: 200-578-6	Inhalation	Non-applicable	Non-applicable	114 mg/m ³	Non-applicable	
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	53 mg/kg	Non-applicable	
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	7 mg/m ³	
Butanone	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable	
CAS: 78-93-3	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable	
EC: 201-159-0	Inhalation	Non-applicable	Non-applicable	106 mg/m ³	Non-applicable	
PNEC:						
Identification						
ethanol	STP	580 mg/L	Fresh water	0,9	96 mg/L	
CAS: 64-17-5	Soil	0,63 mg/kg	Marine water	0,	79 mg/L	
EC: 200-578-6	Intermittent	2,75 mg/L	Sediment (Fresh w	ater) 3,0	ó mg/kg	
	Oral	0,38 g/kg	Sediment (Marine	water) 2,9	9 mg/kg	
Ethanediol	STP	199,5 mg/L	Fresh water	10	mg/L	
CAS: 107-21-1	Soil	1,53 mg/kg	Marine water	1 1	ng/L	
EC: 203-473-3	Intermittent	10 mg/L	Sediment (Fresh w	rater) 37	mg/kg	
	Oral	Non-applicable	Sediment (Marine	water) 3,	7 mg/kg	

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Butanone	STP	709 mg/L	Fresh water	55,8 mg/L
CAS: 78-93-3	Soil	22,5 mg/kg	Marine water	55,8 mg/L
EC: 201-159-0	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg
	Oral	1 g/kg	Sediment (Marine water)	284,7 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CAT II	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Antistatic and fireproof protective clothing		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
Mandatory foot protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2020 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	33,64 % weight
V.O.C. density at 20 °C:	315,27 kg/m³ (315,27 g/L)

ETRA PRO LASINPESU -25C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Average carbon number:

Average molecular weight:

46,39 g/mol

2,02

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties:	
	Appearance:	
	Physical state at 20 °C:	Liquid
	Appearance:	Not available
	Colour:	Blue
	Odour:	Alcohol
	Odour threshold:	Non-applicable *
	Volatility:	
	Boiling point at atmospheric pressure:	>35 °C
	Vapour pressure at 20 °C:	3051 Pa
	Vapour pressure at 50 °C:	15417,67 Pa (15,42 kPa)
	Evaporation rate at 20 °C:	Non-applicable *
	Product description:	
	Density at 20 °C:	937,1 kg/m ³
	Relative density at 20 °C:	0,937
	Dynamic viscosity at 20 °C:	1,05 cP
	Kinematic viscosity at 20 °C:	>1,13 mm ² /s
	Kinematic viscosity at 40 °C:	Non-applicable *
	Concentration:	Non-applicable *
	pH:	7
	Vapour density at 20 °C:	Non-applicable *
	Partition coefficient n-octanol/water 20 °C:	Non-applicable *
	Solubility in water at 20 °C:	Non-applicable *
	Solubility properties:	Non-applicable *
	Decomposition temperature:	Non-applicable *
	Melting point/freezing point:	Non-applicable *
	Flammability:	
	Flash Point:	28 °C
	Flammability (solid, gas):	Non-applicable *
	Autoignition temperature:	400 °C
	Lower flammability limit:	Not available
	Upper flammability limit:	Not available
	Particle characteristics:	
	Median equivalent diameter:	Non-applicable
9.2	Other information:	
	Information with regard to physical hazard classes:	
	Explosive properties:	Non-applicable *
	Oxidising properties:	Non-applicable *
	Corrosive to metals:	Non-applicable *
	Heat of combustion:	Non-applicable *
	*Not relevant due to the nature of the product, not providing information	property of its hazards.

ETRA PRO LASINPESU -25C

SECTION 9: PHYSICAL AND CHEMICAL PROPE	RTIES (continued)			
Aerosols-total percentage (by mass) of flammable components: Other safety characteristics:	Non-applicable *			
Surface tension at 20 °C:	Non-applicable *			
Refraction index:	Non-applicable *			
*Not relevant due to the nature of the product, not providing informa	*Not relevant due to the nature of the product, not providing information property of its hazards.			

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

10.5

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable
Incompatible materials:				

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases
	•			

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2) , carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.

- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.

- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.

- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

ETRA PRO LASINPESU -25C

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.

IARC: ethanol (1)

- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	A	Acute toxicity		
ethanol	LD50 oral	6200 mg/kg	Rat	
CAS: 64-17-5	LD50 dermal	20000 mg/kg	Rabbit	
EC: 200-578-6	LC50 inhalation	124,7 mg/L (4 h)	Rat	
Ethanediol	LD50 oral	>2000 mg/kg		
CAS: 107-21-1	LD50 dermal	>2000 mg/kg		
EC: 203-473-3	LC50 inhalation	>20 mg/L		
Butanone	LD50 oral	4000 mg/kg	Rat	
CAS: 78-93-3	LD50 dermal	6400 mg/kg	Rabbit	
EC: 201-159-0	LC50 inhalation	23,5 mg/L (4 h)	Rat	

Acute Toxicity Estimate (ATE mix):

	Ingredient(s) of unknown toxicity	
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

ETRA PRO LASINPESU -25C

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Concentration	Species	Genus
ethanol	LC50	11000 mg/L (96 h)	Alburnus alburnus	Fish
CAS: 64-17-5	EC50	9268 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-578-6	EC50	1450 mg/L (192 h)	Microcystis aeruginosa	Algae
Ethanediol	LC50	53000 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-21-1	EC50	51000 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-473-3	EC50	24000 mg/L (168 h)	Selenastrum capricornutum	Algae
Butanone	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
CAS: 78-93-3	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
EC: 201-159-0	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
ethanol	NOEC	250 mg/L	Danio rerio	Fish
CAS: 64-17-5 EC: 200-578-6	NOEC	2 mg/L	Ceriodaphnia dubia	Crustacean

12.2 **Persistence and degradability:**

Substance-specific information:

Identification	D	egradability	Bio	Biodegradability	
ethanol	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 64-17-5	COD	Non-applicable	Period	14 days	
EC: 200-578-6	BOD5/COD	Non-applicable	% Biodegradable	89 %	
Ethanediol	BOD5	0,47 g O2/g	Concentration	100 mg/L	
CAS: 107-21-1	COD	1,29 g O2/g	Period	14 days	
EC: 203-473-3	BOD5/COD	0,36	% Biodegradable	90 %	
Butanone	BOD5	2,03 g O2/g	Concentration	Non-applicable	
CAS: 78-93-3	COD	2,31 g O2/g	Period	20 days	
EC: 201-159-0	BOD5/COD	0,88	% Biodegradable	89 %	

12.3 Bioaccumulative potential:

Substance-specific information:

Identification			Bioaccumulation potential	
ethanol		BCF	3	
CAS: 64-17-5		Pow Log	-0.31	
EC: 200-578-6		Potential	Low	
Ethanediol		BCF	10	
CAS: 107-21-1		Pow Log	-1.36	
EC: 203-473-3		Potential	Low	
Butanone		BCF	3	
CAS: 78-93-3		Pow Log	0.29	
EC: 201-159-0		Potential	Low	

12.4 Mobility in soil:

Identification	Abso	rption/desorption		Volatility
ethanol	Koc	1	Henry	4,61E-1 Pa·m³/mol
CAS: 64-17-5	Conclusion	Very High	Dry soil	Yes
EC: 200-578-6	Surface tension	2,339E-2 N/m (25 °C)	Moist soil	Yes
Ethanediol	Koc	0	Henry	1,327E-1 Pa·m ³ /mol
CAS: 107-21-1	Conclusion	Very High	Dry soil	No
EC: 203-473-3	Surface tension	4,989E-2 N/m (25 °C)	Moist soil	No
Butanone	Koc	30	Henry	5,77 Pa·m³/mol
CAS: 78-93-3	Conclusion	Very High	Dry soil	Yes
EC: 201-159-0	Surface tension	2,396E-2 N/m (25 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

ETRA PRO LASINPESU -25C

SECTION 12: ECOLOGICAL INFORMATION (continued)

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP4 Irritant - skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

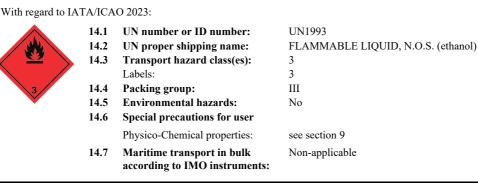
Transport of dangerous goods by land:

With regard to ADR 2021 and	RID 2021:
-----------------------------	-----------

With regard to AL	OK 2021	and RID 2021:	
	14.1	UN number or ID number:	UN1993
	14.2	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
	14.3	Transport hazard class(es):	3
		Labels:	3
	14.4	Packing group:	III
3	14.5	Environmental hazards:	No
•	14.6	Special precautions for user	
		Special regulations:	274, 601
		Tunnel restriction code:	D/E
		Physico-Chemical properties:	see section 9
		Limited quantities:	5 L
	14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transport of dan	gerous	-	
	0		
With regard to IM	DG 40-2	20:	
	14.1	UN number or ID number:	UN1993
	14.2	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
	14.3	Transport hazard class(es):	3
		Labels:	3
$\langle \simeq \rangle$	14.4	Packing group:	III
	14.5	Marine pollutant:	No
3	14.6	Special precautions for user	
•		Special regulations:	274, 223, 955
		EmS Codes:	F-E, S-E
		Physico-Chemical properties:	see section 9
		Limited quantities:	5 L
		Segregation group:	Non-applicable
	14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable

SECTION 14: TRANSPORT INFORMATION (continued)

Transport of dangerous goods by air:



SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: ethanol (Product-type 1, 2, 4)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description		Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000
T I I I			``

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

-games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products

- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents

- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII

- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H226: Flammable liquid and vapour.

Texts of the legislative phrases mentioned in section 3:

SECTION 16: OTHER INFORMATION (continued)
The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3
CLP Regulation (EC) No 1272/2008:
Acute Tox. 4: H302 - Harmful if swallowed.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).
STOT SE 3: H336 - May cause drowsiness or dizziness.
Classification procedure:
Flam. Liq. 3: Calculation method (2.6.4.3)
Advice related to training:
Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation
of this safety data sheet, as well as the label on the product.
Principal bibliographical sources:
http://echa.europa.eu
http://eur-lex.europa.eu
Abbreviations and acronyms:
ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.