

7

Product name: NZYMaxiprep Endotoxin Free

Catalogue reference(s): MB39901, 5 columns

MB39902, 2 x 5 columns

Components	MB39901	MB39902	Safety Information	Unique Formula Identifier (UFI)
Buffer NML3-EF	1 x 80 mL	2 x 80 mL	Not Hazardous *	
70% Ethanol (conc.)	1 x 15 mL	2 x 15 mL	Not Hazardous *	
NZYMaxi-EF Columns	5 columns	2 x 5 columns	Not Hazardous *	
Buffer NML2-EF	1 x 80 mL	2 x 80 mL	See specific SDS	A600-C05J-S00V-5TGV
Buffer NMEQ-EF	1 x 50 mL	2 x 50 mL	See specific SDS	PC00-C0JC-D00V-GGP0
Buffer NMEL-EF	1 x 100 mL	2 x 100 mL	See specific SDS	8F00-V07R-Q00C-4U82
RNase A (lyoph)	1 x 7 mg	2 x 7 mg	See specific SDS	
NZYPlastic Washers	2 units	2 x 2 units	Not Hazardous *	
Buffer NMW2-EF	1 x 150 mL	2 x 150 mL	See specific SDS	3M00-V0MJ-A00C-FHE6
Endotoxin-Free H ₂ O	1 x 15 mL	2 x 15 mL	Not Hazardous *	
NZYFolded Filters	5 units	2 x 5 units	Not Hazardous *	
Buffer NML1-EF	1 x 70 mL	2 x 70 mL	Not Hazardous *	
Buffer NMW1-EF	250 mL + 50 mL	2 x (250 mL + 50 mL)	See specific SDS	HH00-C0X5-000V-T5U4
Buffer NME-EF	1 x 15 mL	2 x 15 mL	Not Hazardous *	

*The component mentioned above is not classified as hazardous according to CLP Regulation (EC) No 1272/2008. Consequently, does not require a Safety Data Sheet (SDS), according to Regulation (EC) No 1907/2006, emended by Regulation (EC) No 2020/878.

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legislation MB399 - Buffer NML2-EF

	compilation: 13/08/2020 Revised: 09/02/2024 Version: 6 (Replaced 5)
SECT	TON 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier: MB399 - Buffer NML2-EF
	Other means of identification:
	Non-applicable
1.2	Relevant identified uses of the substance or mixture and uses advised against:
	Relevant uses: Laboratory. For professional users only.
	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:
	NZYtech, Lda Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal Phone: +351 213643514 info@nzytech.com www.nzytech.com
1.4	Emergency telephone number: Contact Local Poison Information Center or Local Emergency Number
SECT	TON 2: HAZARDS IDENTIFICATION **
2.1	Classification of the substance or mixture:
	Product classified regardless of its extreme pH.
	CLP Regulation (EC) No 1272/2008:
	Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
2.2	Eye Irrit. 2: Eye irritation, Category 2, H319 Skin Irrit. 2: Skin irritation, Category 2, H315 Label elements:
	CLP Regulation (EC) No 1272/2008:
	Labelling of packages where the contents do not exceed 125 ml:
	Warning
	Hazard statements:
	Non-applicable
	Precautionary statements:
	Non-applicable
	UFI: A600-C05J-S00V-5TGV
2.3	Other hazards:
	Product does not meet PBT/vPvB criteria Endocrine-disrupting properties: The product does not meet the criteria.

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

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

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	Identification		Chemical name/Classification	Concentratio	
CAS:	1310-73-2	sodium hydroxide ⁽¹⁾	ATP CLP00		
EC: Index: REACH:	215-185-5 011-002-00-6 01-2119457892-27- XXXX	Regulation 1272/2008	Skin Corr. 1A: H314 - Danger	0,5 - <1 %	
(1) Subst		n or environmental hazard w	hich meet criteria laid down in Regulation (EU) No. 2020/878		
To obtain more information on the hazards of the substances consult sections 11, 12 and 16.					

Identification	Specific concentration limit
CAS: 1310-73-2 EC: 215-185-5	% (w/w) >=5: Skin Corr. 1A - H314 2<= % (w/w) <5: Skin Corr. 1B - H314 0,5<= % (w/w) <2: Skin Irrit. 2 - H315 % (w/w) >=2: Eye Dam. 1 - H318 0,5<= % (w/w) <2: 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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or 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 eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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

Extinguishing media: 5.1

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

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	TION 5: FIREFIGHTING MEASURES (continued)
JLC	
5.3	As a result of combustion or thermal decomposition reactive sub-products are created that can becomposition consequently, can present a serious health risk. Advice for firefighters:
	Depending on the magnitude of the fire it may be necessary to use full protective clothing and self- (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable fi with Directive 89/654/EC. Additional provisions:
	Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take a emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products use aqueous medium.
CECT	
SEC	TION 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. Personal p used against potential contact with the spilt product (See section 8). Evacuate the area and keep or protection. For emergency responders:
6.2	Wear protective equipment. Keep unprotected persons away. See section 8.
6.2	Environmental precautions:
6.3	This product is not classified as hazardous to the environment. Keep product away from drains, surf
0.5	Methods and material for containment and cleaning up: It is recommended:
6.4	Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in saw absorbents. For any concern related to disposal consult section 13. Reference to other sections:
••••	See sections 8 and 13.
SEC	TION 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 with regards ma Maintain order, cleanliness and dispose of using safe methods (section 6). B Technical recommendations for the prevention of fires and explosions
	Product is non-flammable under normal conditions of storage, handling and use. It is recommer to avoid the generation of electrostatic charges that can affect flammable products. Consult sect 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 produc
	D Technical recommendations to prevent environmental risks
	It is recommended to have absorbent material available at close proximity to the product (See s
7.2	Conditions for safe storage, including any incompatibilities:
	A Technical measures for storage
	Store in a cool, dry, well-ventilated location
	B General conditions for storage
	Avoid sources of heat, radiation, static electricity and contact with food. For additional informati
7.3	Specific end use(s):
	- CONTINUED ON NEXT PAGE -
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SECTION

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5.3 Ad

-contained breathing apparatus De (SC first aid kit,...) in accordance wit

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SECTION

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6.2 En

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6.3 Me

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6.4 Re

SECTION

7.1 Pre

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subsection 6.3)

7.2 Со

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7.3 Sp

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SECTION 7: HANDLING AND STORAGE (continued)

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):

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

		Short e	xposure	Long exposure	
Identification		Systemic	Local	Systemic	Local
sodium hydroxide	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1310-73-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 215-185-5	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³

DNEL (General population):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
sodium hydroxide	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1310-73-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 215-185-5	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³

PNEC:

Non-applicable

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				

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	N 8: EXPOSURE	CONTRC	LS/PERSON	AL PROTECT	ION (continu	ed)			
	Pictogram		PPE	Labelling	CEN Stan	dard		Remarks	
		Wor	k clothing	CATI			perioo recom	ce before any evidence of deterioration. For ds of prolonged exposure to the product for professional/industrial users CE III is imended, in accordance with the regulation ISO 6529:2013, EN ISO 6530:2005, EN IS 13688:2013, EN 464:1994.	
			o work shoes		EN ISO 2034	ł7:2012	perioo recom	ce before any evidence of deterioration. For ds of prolonged exposure to the product for professional/industrial users CE III is imended, in accordance with the regulation EN ISO 20345:2012 y EN 13832-1:2007	
F.	- Additional emerge	ency meas	ures						
	Emergency mea	isure	S	tandards	Emer	gency measu	ure	Standards	
	Emergency sho	wer		SI Z358-1 011, ISO 3864-4:20		wash station	s	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011	
	nvironmental exp								
								nmended to avoid environmental	
V	spillage of both the product and its container. For additional information see subsection 7.1.D Volatile organic compounds:								
W	ith regard to Directi	ve 2010/7	5/EU, this pro	duct has the fol	lowing characte	eristics:			
	V.O.C. (Supply):		0 %	weight					
	V.O.C. density at 2	20 °C:	0 kg/	/m³ (0 g/L)					
	Average carbon n	umber:	Non-	applicable	plicable				
	Average molecular	r weight:	Non-	applicable					
ECTIO									
	N 9: PHYSICAL A								
1 Ir	nformation on bas	sic physic	al and chem	ical properties	5:				
1 Ir Fo	nformation on bas	sic physic	al and chem	ical properties	5:				
1 Ir Fo Aj	nformation on bas or complete informat ppearance:	sic physic tion see th	al and chem	ical properties asheet.					
.1 Ir Fc A J Pt	nformation on bas or complete informat ppearance: nysical state at 20 °C	sic physic tion see th	al and chem	ical properties asheet. Liqui	id				
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1 Ir Fc Al Pr Al Cc Od Od Od Dd Bc	nformation on bas or complete informat ppearance: nysical state at 20 °C opearance: olour: dour: dour: dour threshold: olatility: piling point at atmos	sic physic tion see th C: Spheric pre	al and chem	ical properties asheet. Liqui Not a Blue Odo	id available urless •applicable *				
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1 Ir Fc Al Pr Al Cc Ou Ou Ou Ou Ou Ou Ou Ou Ou Ou Ou Ou Ou	nformation on bas or complete informat ppearance: hysical state at 20 % opearance: olour: dour: dour threshold: olatility: piling point at atmos apour pressure at 20	sic physic tion see th C: Spheric pre 0 °C: 0 °C:	al and chem	ical properties asheet. Liqui Not a Blue Odou Non- 100 2350 1238	id available urless applicable * °C) Pa	8 kPa)			
1 Ir Fc Al Pr Al Cc Ou Ou Ou Bc Va Va Ev	nformation on bas pr complete informat ppearance: hysical state at 20 °C ppearance: blour: dour: dour: dour threshold: blatility: biling point at atmos apour pressure at 20 apour pressure at 20	sic physic tion see th C: spheric pre 0 °C: 0 °C: 0 °C:	al and chem	ical properties asheet. Liqui Not a Blue Odou Non- 100 2350 1238	id available urless ·applicable * •C) Pa 81,01 Pa (12,3:	8 kPa)			
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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTI	ES (continued)
	Concentration:	Non-applicable *
	pH:	13
	Vapour density at 20 ºC:	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:	Non Flammable (>60 °C)
	Flammability (solid, gas):	Non-applicable *
	Autoignition temperature:	Non-applicable *
	Lower flammability limit:	Non-applicable *
	Upper flammability limit:	Non-applicable *
	Particle characteristics:	
	Median equivalent diameter:	Non-applicable
9.2	Other information:	
	Information with regard to physical hazard cla	asses:
	Explosive properties:	Non-applicable *
	Oxidising properties:	Non-applicable *
	Corrosive to metals:	Non-applicable *
	Heat of combustion:	Non-applicable *
	Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
	Other safety characteristics:	
	Surface tension at 20 °C:	Non-applicable *
	Refraction index:	Non-applicable *
	*Not relevant due to the nature of the product, not providing in	formation property of its hazards.

SECT	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 from Safety Data Sheet.									
10.2	Chemical stability:									
	Chemically stable under the	e indicated conditions of s	torage, handling and use.							
10.3	Possibility of hazardous	reactions:								
	Under the specified conditi	ons, hazardous reactions t	that lead to excessive tem	peratures or pressure are	not expected.					
10.4	Conditions to avoid:									
	Applicable for handling and	l storage at room tempera	ture:							
	Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity					
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable					
10.5	Incompatible materials	:								
	Acids	Water	Oxidising materials	Combustible materials	Others					
	Avoid strong acids	Not applicable	Precaution	Not applicable	Not applicable					

10.6 Hazardous decomposition products:

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Date of compilation: 13/08/2020 Revised: 09/02/2024 Version: 6 (Replaced 5) SECTION 10: STABILITY AND REACTIVITY (continued) 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 (CO₂), 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 **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, as it does not contain substances classified as hazardous for consumption. For more information see section 3 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting. 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. However, it does 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: Produces skin inflammation. - Contact with the eyes: Produces eye damage after contact. D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction): - 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: Non-applicable 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, as it does not contain substances classified as hazardous for this effect. 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, as it does not 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, as it does not contain substances classified as hazardous for this effect. 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:

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SECTION 11: TOXICOLOGIC	AL INFORMATION (contin	nued)				
	Identification			Acute toxicity		Genus
sodium hydroxide			LD50 oral	>2000 mg/	/kg	
CAS: 1310-73-2			LD50 dermal	>2000 mg/	/kg	
EC: 215-185-5			LC50 inhalatio	n >5 mg/L		
Acute Toxicity Estimate	(ATE mix):					
	ATE mix			Ingredien	t(s) of unknown to	oxicity
Oral	>2000 mg/kg (Calculati	ion method)		Non-applicable		
Dermal	>2000 mg/kg (Calculati	ion method)		Non-applicable		

Non-applicable

Inhalation >20 mg/L (4 h) (Calculation method)

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not 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

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.

12.1 Toxicity:

Acute toxicity:

Identification		Concentration	Species	Genus	
sodium hydroxide	LC50	189 mg/L (48 h)	Leuciscus idus	Fish	
CAS: 1310-73-2	EC50	33 mg/L	Crangon crangon	Crustacean	
EC: 215-185-5	EC50	Non-applicable			

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment: Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not 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	Non dangerous
Type of wast Non-applicable	te (Regulation (EU) No 1357/2014):	

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Version: 6 (Replaced 5)

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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 2023 and RID 2023:

14.1	UN number or ID number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transpo	rt of dangerous goods by sea:	
With rega	ard to IMDG 40-20:	
14.1	UN number or ID number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Marine pollutant:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transpo	rt of dangerous goods by air:	
With rega	ard to IATA/ICAO 2023:	

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SECTION 14: T	RANSPORT INFORMATION *	* (continued)	
14.1	UN number or ID number:	Non-applicable	
14.2	UN proper shipping name:	Non-applicable	
14.3	Transport hazard class(es):	Non-applicable	
	Labels:	Non-applicable	
14.4	Packing group:	Non-applicable	
14.5	Environmental hazards:	No	
14.6	Special precautions for user		
	Physico-Chemical properties:	see section 9	
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable	

** Changes with regards to the previous version

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: Non-applicable

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

Seveso III:

Non-applicable

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

Shall not be used in:

—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

tricks and jokes,

-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

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.:

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SECTION 16: OTHER INFORM	MATION ** (continued)	
 Pictograms Hazard statements Precautionary statement TRANSPORT INFORMATION UN number Packing group Texts of the legislative p H315: Causes skin irritation H319: Causes serious eye i Texts of the legislative p The phrases indicated do n individual components which CLP Regulation (EC) No Skin Corr. 1A: H314 - Cause 	N (SECTION 14): chrases mentioned in sec n. rritation. chrases mentioned in sec ot refer to the product itself; ch appear in section 3 1272/2008: es severe skin burns and eye :	tion 2: tion 3: they are present merely for informative purposes and refer to the
Skin Irrit. 2: Calculation me Eye Irrit. 2: Calculation me		
Advice related to trainin		
Training is recommended in	-	risks for staff using this product and to facilitate their comprehension and abel on the product.
Principal bibliographica	sources:	
http://echa.europa.eu http://eur-lex.europa.eu		
Abbreviations and acro	•	
ADR: European agreement IMDG: International maritin IATA: International Air Trar ICAO: International Civil Av COD: Chemical Oxygen De BOD5: 5day biochemical ox BCF: Bioconcentration facto LD50: Lethal Dose 50 LC50: Lethal Concentration EC50: Effective concentration EC50: Effective concentration LogPOW: Octanolwater par Koc: Partition coefficient of UFI: unique formula identif IARC: International Agency	ne dangerous goods code asport Association riation Organisation mand aygen demand or 50 on 50 tition coefficient organic carbon ier	carriage of dangerous goods by road

** Changes with regards to the previous version

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.

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	compilation: 19/09/2023 Revised: 13/03/2024 Version: 8 (Replaced 7)
SECT	TON 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier: MB399 - Buffer NMEQ-EF
	Other means of identification:
	Non-applicable
1.2	Relevant identified uses of the substance or mixture and uses advised against:
	Relevant uses: Laboratory. For professional users only.
	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:
	NZYtech, Lda Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal Phone: +351 213643514 info@nzytech.com www.nzytech.com
1.4	Emergency telephone number: National Poison Center (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your regional Poisons Information Service or call local Life Saving Service.

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.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412 Eye Irrit. 2: Eye irritation, Category 2, H319 Flam. Liq. 3: Flammable liquids, Category 3, H226

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Labelling of packages where the contents do not exceed 125 ml: Warning

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

Non-applicable

UFI: PC00-C0JC-D00V-GGP0

2.3 Other hazards:

Product does not meet PBT/vPvB criteria The product contains substances with endocrine-disrupting properties: Polyethylene glycol mono(octylphenyl) ether

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

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

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Date of compilation: 19/09/2023 Revised: 13/03/2024 Version: 8 (Replaced 7) SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued) Identification Chemical name/Classification Concentration 64-17-5 ethanol⁽¹⁾ ATP CLP00 CAS: 200-578-6 EC: 5 - <20 % Index: 603-002-00-5 REACH: 01-2119457610-43-Flam. Liq. 2: H225 - Danger 1 Regulation 1272/2008 XXXX CAS: 9036-19-5 Polyethylene glycol mono(octylphenyl) ether⁽²⁾ Self-classified FC 935-231-4 0,25 - <2,5 Index: Acute Tox. 4: H302; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Irrit. 2: Non-applicable Regulation 1272/2008 % REACH: Non-applicable H315 - Danger (1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878 ⁽²⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878 To obtain more information on the hazards of the substances consult sections 11, 12 and 16. Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation: Identification Acute toxicity Genus 500 mg/kg (ATEi) Polyethylene glycol mono(octylphenyl) ether LD50 oral

** Changes with regards to the previous version

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:

CAS: 9036-19-5

EC: 935-231-4

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

LD50 dermal

LC50 inhalation

Non-applicable

Non-applicable

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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.

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SECTION 5: FIREFIGHTING MEASURES (continued)

5.2 Special hazards arising from the substance or mixture:

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.

Advice for firefighters: 5.3

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:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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

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SECT	TION 7: HANDLING AND	STORAGE (contine	ued)					
7.2	Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity. Conditions for safe storage, including any incompatibilities:							
	A Technical measures for	storage						
	Store in a cool, dry, we	II-ventilated location						
	B General conditions for s	storage						
	Avoid sources of heat, I	radiation, static electr	icity and conta	ct with food. For	additional inforn	nation see sub	osection 10.5	
7.3	Specific end use(s):							
	Except for the instructions product.	already specified it is	not necessary	to provide any sp	ecial recommen	dation regard	ing the uses of th	
SECT	TION 8: EXPOSURE CON	TROLS/PERSONAL	PROTECTIO	DN				
8.1	Control parameters:							
	Substances whose occupatilegislation): There are no applicable occ						ountry-specific	
	DNEL (Workers):			Short	exposure		ong exposure	
	Identifica	ation		Systemic	Local	Systemic		
	ethanol		Oral	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	
	DNEL (General population	on):						
				Short	exposure	Lo	ong exposure	
	Identifica	ation		Systemic	Local	Systemic	Local	
			Oral	Non-applicable	Non-applicable	87 mg/kg	Non-applicable	
	ethanol		0.4					
	ethanol CAS: 64-17-5		Dermal	Non-applicable	Non-applicable	206 mg/kg	Non-applicable	
					Non-applicable Non-applicable	206 mg/kg 114 mg/m ³		
	CAS: 64-17-5		Dermal	Non-applicable				
	CAS: 64-17-5 EC: 200-578-6	tion	Dermal	Non-applicable				
	CAS: 64-17-5 EC: 200-578-6 PNEC:	tion	Dermal	Non-applicable Non-applicable 580 mg/L			Non-applicable	
	CAS: 64-17-5 EC: 200-578-6 PNEC: Identifica ethanol CAS: 64-17-5	tion	Dermal Inhalation STP Soil	Non-applicable Non-applicable 580 mg/L 0,63 mg/kg	Non-applicable Fresh water Marine water	114 mg/m ³	Non-applicable 0,96 mg/L 0,79 mg/L	
	CAS: 64-17-5 EC: 200-578-6 PNEC: Identifica ethanol	tion	Dermal Inhalation STP Soil Intermittent	Non-applicable Non-applicable 580 mg/L 0,63 mg/kg 2,75 mg/L	Non-applicable Fresh water Marine water Sediment (Fresh	114 mg/m ³	0,79 mg/L 3,6 mg/kg	
8.2	CAS: 64-17-5 EC: 200-578-6 PNEC: Identifica ethanol CAS: 64-17-5 EC: 200-578-6	tion	Dermal Inhalation STP Soil	Non-applicable Non-applicable 580 mg/L 0,63 mg/kg	Non-applicable Fresh water Marine water	114 mg/m ³	Non-applicable 0,96 mg/L 0,79 mg/L	
8.2	CAS: 64-17-5 EC: 200-578-6 PNEC:		Dermal Inhalation STP Soil Intermittent Oral	Non-applicable Non-applicable 580 mg/L 0,63 mg/kg 2,75 mg/L 0,38 g/kg	Non-applicable Fresh water Marine water Sediment (Fresh	114 mg/m ³	Non-applicable 0,96 mg/L 0,79 mg/L 3,6 mg/kg	
8.2	CAS: 64-17-5 EC: 200-578-6 PNEC: Identifica ethanol CAS: 64-17-5 EC: 200-578-6 Exposure controls: A Individual protection me	easures, such as pers	Dermal Inhalation STP Soil Intermittent Oral	Non-applicable Non-applicable	Non-applicable Fresh water Marine water Sediment (Fresh Sediment (Marin	114 mg/m ³	Non-applicable 0,96 mg/L 0,79 mg/L 3,6 mg/kg 2,9 mg/kg	
8.2	CAS: 64-17-5 EC: 200-578-6 PNEC:	easures, such as pers ure it is recommended ice with Regulation (E ance, class of protection tion 7.1. All information	Dermal Inhalation STP Soil Intermittent Oral Oral onal protective d to use basic U) 2016/425. on,) consult f	Non-applicable Non-applicable S80 mg/L 0,63 mg/kg 2,75 mg/L 0,38 g/kg e equipment Personal Protectiv For more information le normation is a recomm	Non-applicable Fresh water Marine water Sediment (Frest Sediment (Marin e Equipment, wion on Personal aflet provided by endation which	114 mg/m ³ 114 mg/m ³ water) water) water) the water) ith the corresp Protective Eq / the manufac needs some some some some some some some som	Non-applicable 0,96 mg/L 0,79 mg/L 3,6 mg/kg 2,9 mg/kg 2,9 mg/kg ponding < <ce uipment (storage turer. For more specification fron</ce 	
8.2	CAS: 64-17-5 EC: 200-578-6 PNEC: CAS: 64-17-5 EC: 200-578-6 Exposure controls: A Individual protection me As a preventative meas marking>> in accordan use, cleaning, maintena information see subsect the labour risk prevention	easures, such as pers ure it is recommende ice with Regulation (E ance, class of protectio tion 7.1. All information on services as it is no	Dermal Inhalation STP Soil Intermittent Oral Oral Oral Oral Oral Oral Oral Oral	Non-applicable Non-applicable Non-applicable 580 mg/L 0,63 mg/kg 2,75 mg/L 0,38 g/kg e equipment Personal Protective For more information legerein is a recommer the information legerein is a recommer the company her	Non-applicable Fresh water Marine water Sediment (Fresh Sediment (Marin e Equipment, w ion on Personal aflet provided by hendation which has additional m	114 mg/m ³ 114 mg/m ³ n water) ne water) ith the corres Protective Eq / the manufac needs some s easures at its	Non-applicable 0,96 mg/L 0,79 mg/L 3,6 mg/kg 2,9 mg/kg ponding < <ce uipment (storage cturer. For more specification fron disposal.</ce 	

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СТ	ION 8: EXPOSURE	CONTROLS/PERSON	IAL PROTECTI	ON (continued)				
	Pictogram	PPE	Labelling	CEN Standard		Remarks		
	Mandatory hand protection	Chemical protective gloves (Material: Linear low-densit polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN ISO 21420:2020	Repla	ice the gloves at any sign of deterioration		
		d has therefore to be ch			erial can	not be calculated in advance with		
	Pictogram	PPE	Labelling	CEN Standard		Remarks		
	Mandatory face protection	Panoramic glasses against splash/projections.	CAT II	EN 166:2002 EN ISO 4007:2018		daily and disinfect periodically according anufacturer´s instructions. Use if there is 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 resistan properties		EN ISO 13287:2020 EN ISO 20345:2011	Re	Replace boots at any sign of deterioration		
	F Additional emerge	ency measures						
	Emergency me	asure	Standards	Emergency meas	sure	Standards		
	Emergency sh	ISO 3864-1:2	NSI Z358-1 011, ISO 3864-4:20	11 Eyewash station	ns	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011		
	spillage of both the p Volatile organic co	and its container mpounds: ive 2010/75/EU, this pro- 19 9 20 °C: 193 number: 2	: For additional in	nformation see subsectio lowing characteristics:		nmended to avoid environmental		
ECT 1		AND CHEMICAL PRO		::				
	For complete informa	ation see the product da						
	Appearance:			J				
	Physical state at 20 °C:			Liquid				
	-	с.						
	Physical state at 20 ^c Appearance: Colour:	с.	Not a	available urless				

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	compilation: 19/09/2023 Revised: 13/03/2024	Version: 8 (Replaced 7)			
SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIE	ES (continued)			
	Odour:	Alcohol			
	Odour threshold:	Non-applicable *			
	Volatility:				
	Boiling point at atmospheric pressure:	94 °C			
	Vapour pressure at 20 °C:	2759 Pa			
	Vapour pressure at 50 °C:	14164,19 Pa (14,16 kPa)			
	Evaporation rate at 20 °C:	Non-applicable *			
	Product description:				
	Density at 20 °C:	1016,5 kg/m³			
	Relative density at 20 °C:	1,017			
	Dynamic viscosity at 20 °C:	Non-applicable *			
	Kinematic viscosity at 20 °C:	Non-applicable *			
	Kinematic viscosity at 40 °C:	Non-applicable *			
	Concentration:	Non-applicable *			
	pH:	6 - 6,5			
	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:	38 °C			
	Flammability (solid, gas):	Non-applicable *			
	Autoignition temperature:	423 °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 clas	sses:			
	Explosive properties:	Non-applicable *			
	Oxidising properties:	Non-applicable *			
	Corrosive to metals:	Non-applicable *			
	Heat of combustion:	Non-applicable *			
	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 info				

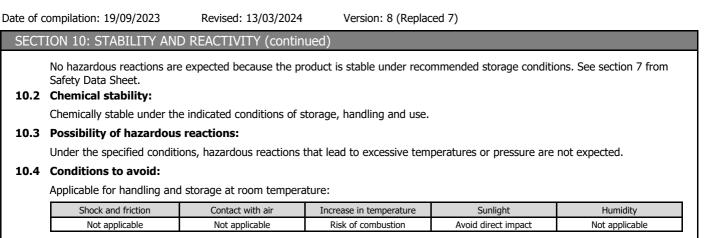
SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

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10.5 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 (CO2), 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

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. However, it does 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. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - 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:

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-CT	TON 11: TOXICOLOGICAL	ΙΝΕΟΡΜΑΤΙΟΝ ** (continue		placed 7)								
				,									
	 Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances class 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, t this effect. For more infor G- Specific target organ toxic	mation see section 3.		et, as it doe	s not conta	in subs	tances classified as h	azardous for					
	 Specific target organ to it does not contain substa Skin: Based on availabl hazardous for this effect. H- Aspiration hazard: 	nces classified as hazard e data, the classification	lous for th criteria a	nis effect. Fo re not met,	r more info	rmatio	n see section 3.						
	Based on available data, t this effect. For more infor Other information:		are not m	et, as it doe	s not conta	in subs	tances classified as h	azardous for					
	Non-applicable												
	Non-applicable Specific toxicology information on the substances:												
	Specific toxicology inform	ation on the substance	:es:										
		Identification					te toxicity	Genus					
	ethanol				LD50 oral		6200 mg/kg	Rat					
		CAS: 64-17-5			LD50 dermal		20000 mg/kg	Rabbit					
	EC: 200-578-6	N			LC50 inhalation	on	124,7 mg/L (4 h)	Rat					
	Polyethylene glycol mono(octylpher	nyl) ether			LD50 oral		500 mg/kg (ATEi) >2000 mg/kg						
	CAS: 9036-19-5 EC: 935-231-4				LD50 dermal LC50 inhalation		Non-applicable						
	Acute Toxicity Estimate (A	TE mix)					Non-applicable						
		ATE mix					Ingradiant(c) of unknow	n tovicity					
	Oral	20833,33 mg/kg (Ca	culation mo	thod)		0.9%	Ingredient(s) of unknown toxicity						
	Dermal	>2003,55 Hig/kg (Calcu		,			0 % Non-applicable						
	Inhalation	>20 mg/L (4 h) (Cal		-		-	Non-applicable						
L.2	Information on other haza						picable						
	Endocrine disrupting prop	erties											
	Endocrine-disrupting propertie		t moot the	a critoria									
				e chitena.									
	Other information												
	Non-applicable												
	ges with regards to the previous version												
hang	ges with regards to the previous	s version											
-													
-	ges with regards to the previous												
ECT	Ton 12: Ecological Inf	ORMATION **	propertie	es of the pro	duct itself i	s not a	vailable						
ECT	TION 12: ECOLOGICAL INF xperimental information related	ORMATION ** I to the eco-toxicological	propertie	es of the pro	duct itself i	s not a	vailable						
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last	ORMATION ** I to the eco-toxicological	propertie	es of the pro	duct itself i	s not a	vailable						
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last Toxicity:	ORMATION ** I to the eco-toxicological	propertie	es of the pro	duct itself i	s not a	vailable						
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last	ORMATION ** I to the eco-toxicological	propertie	es of the pro	duct itself i	s not a	vailable						
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last Toxicity:	ORMATION ** I to the eco-toxicological ing effects.	propertie	Concentrat	ion	s not a	vailable Species	Genus					
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last Toxicity: Acute toxicity:	ORMATION ** I to the eco-toxicological ing effects.	propertie	Concentrat 11000 mg/L (ion 96 h)	s not a		Genus Fish					
ECT ne ex armf	TION 12: ECOLOGICAL INF xperimental information related ful to aquatic life with long last Toxicity: Acute toxicity: Identifica	ORMATION ** I to the eco-toxicological ing effects.		Concentrat	ion 96 h)	s not a	Species						

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	ION 12: ECOLOGICAL INFORMATION	** (contir	nued)						
	Identification			Concentration		Spe	ecies	Genus	
	Polyethylene glycol mono(octylphenyl) ether		LC50	>0.1 - 1 mg/L (96 h)				Fish	
	CAS: 9036-19-5		EC50	>0.1 - 1 mg/L (48 h)				Crustacear	
	EC: 935-231-4		EC50	>0.1 - 1 mg/L (72 h)				Algae	
	Chronic toxicity:								
	Identification			Concentration		Spe	ecies	Genus	
	ethanol		NOEC	250 mg/L		Danio	o rerio	Fish	
	CAS: 64-17-5 EC: 200-578-6		NOEC	2 mg/L		Ceriodapl	nnia dubia	a Crustacear	
12.2	Persistence and degradability:								
	Substance-specific information:								
	Identification		De	gradability		Bio	odegrada	bility	
	ethanol	BOD5		Non-applicable	Con	centration		100 mg/L	
	CAS: 64-17-5	COD		Non-applicable	Peri			14 days	
	EC: 200-578-6	BOD5,	/COD	Non-applicable	% E	Biodegradable		89 %	
12.3	Bioaccumulative potential:								
	Substance-specific information:								
	Identific	cation				Bioaco	cumulatio	n potential	
	ethanol		BCF		КСF	3			
	CAS: 64-17-5 EC: 200-578-6			Pow Log Potential		ow Log	v Log -0.31		
						otential	Low		
12.4	Mobility in soil:								
	Identification		Abso	orption/desorption			Volatility		
	ethanol	Koc		1	1 Henry		,		
	CAS: 64-17-5	Conclu					,		
17 5	EC: 200-578-6 Results of PBT and vPvB assessment:	Surrac	e tension	2,339E-2 N/m (2	25 °C)	Moist soil		Yes	
12.5									
	Product does not meet PBT/vPvB criteria								
12.6	6 Endocrine disrupting properties: Contains Polyethylene glycol mono(octylphenyl) ether. A substance shall be considered as having endocrine-disrupting properties that may cause adverse effects on non-target organisms if: (a) it shows an adverse effect in non-target organisms, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences (b) it has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system (c) the adverse effect is a consequence of the endocrine mode of action.								
12.7	2.7 Other adverse effects:								
	Not described								
Chanc	ges with regards to the previous version								
Chang									
	ION 13: DISPOSAL CONSIDERATIONS	5							
SECT									
	Waste treatment methods:								

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

HP14 Ecotoxic, HP3 Flammable

Waste management (disposal and evaluation):

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SECTION 13: DISPO	SAL CC	NSIDERATIONS (continued)						
2 (Directive 2008 the product, it w Waste should no	8/98/EC). ill be pro t be disp	. As under 15 01 (2014/955/EC) o	ssment and disposal operations in accordance with Annex 1 and Ann f the code and in case the container has been in direct contact with al product. Otherwise, it will be processed as non-dangerous residue 6.2.					
-	In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste							
management are								
Community legis	lation: D	irective 2008/98/EC, 2014/955/EU	I, Regulation (EU) No 1357/2014					
SECTION 14: TRANS	SPORT I	INFORMATION **						
Other informa								
		ecial Provision A58(144) IATA(ADR						
		us goods by land:	·/·					
-	-	23 and RID 2023:						
		UN number or ID number:	UN1993					
	14.2	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)					
JHL .		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 c	langero	ous goods by sea:						
With regard to 1	-							
		UN number or ID number:	UN1993					
		UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)					
		Transport hazard class(es):	3					
J.	14.5	Labels:	3					
$\langle \simeq \rangle$	14.4	Packing group:	III					
		Marine pollutant:	No					
3		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					
Transport of a	langero	bus goods by air:						
-	-							
With regard to 2	IATA/ICA	40 2023:						

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SECTION 14: TRANSPO	RT INFORMATION ** (continue	d)
	 4.1 UN number or ID number: 4.2 UN proper shipping name: 4.3 Transport hazard class(es): Labels: 4.4 Packing group: 4.5 Environmental hazards: 4.6 Special precautions for user 	3 III No
1	Physico-Chemical properties: 4.7 Maritime transport in bulk according to IMO instruments:	see section 9 Non-applicable

** Changes with regards to the previous version

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): Polyethylene glycol mono(octylphenyl) ether

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Polyethylene glycol mono(octylphenyl) ether (04/01/2021)

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	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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

Shall not be used in:

-ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtravs.

tricks and jokes,

-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

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.:

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SECTION 16: OTHER INFORM	1ATION (continued)	
 New declared substance ethanol (64-17-5) TRANSPORT INFORMATION UN number Packing group 	es I (SECTION 14):	TON 3, SECTION 11, SECTION 12):
	phrases mentioned in sect	tion 2:
H319: Causes serious eye in H412: Harmful to aquatic lit H226: Flammable liquid and	e with long lasting effects.	
Texts of the legislative p	phrases mentioned in sect	tion 3:
The phrases indicated do no individual components whic	• •	they are present merely for informative purposes and refer to the
CLP Regulation (EC) No	1272/2008:	
Eye Dam. 1: H318 - Causes	/ery toxic to aquatic life with s serious eye damage. flammable liquid and vapour	
Classification procedure	:	
Eye Irrit. 2: Calculation met Aquatic Chronic 3: Calculati Flam. Liq. 3: Calculation me	on method	
Advice related to trainin		
	order to prevent industrial r data sheet, as well as the la	isks for staff using this product and to facilitate their comprehension and bel on the product.
Principal bibliographical	sources:	
http://echa.europa.eu http://eur-lex.europa.eu		
Abbreviations and acron	yms:	
IMDG: International maritin IATA: International Air Tran ICAO: International Civil Av COD: Chemical Oxygen Der BOD5: 5day biochemical ox BCF: Bioconcentration facto LD50: Lethal Dose 50 LC50: Lethal Concentration EC50: Effective concentratio LogPOW: Octanolwater part Koc: Partition coefficient of	ne dangerous goods code sport Association iation Organisation nand ygen demand r 50 50 50 50 cition coefficient	carriage of dangerous goods by road
UFI: unique formula identifi IARC: International Agency	er	

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.

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Date of	compilation: 19/09/2023 R	evised: 13/03/2024	Version: 4 (Replaced 3)					
SECT	TION 1: IDENTIFICATION OF	THE SUBSTANCE/M	IXTURE AND OF THE COMPANY/UNDERTAKING					
1.1	1.1 Product identifier: MB399 - Buffer NMEL-EF							
	Other means of identification:							
	Non-applicable							
1.2	Relevant identified uses of t	ne substance or mixt	ire and uses advised against:					
	Relevant uses: Laboratory. For p	rofessional users only.						
	Uses advised against: All uses no	ot specified in this section	n or in section 7.3					
1.3	Details of the supplier of the	safety data sheet:						
	NZYtech, Lda Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal Phone: +351 213643514 info@nzytech.com www.nzytech.com							
1.4	Emergency telephone number		ter (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your ormation Service or call local Life Saving Service.					

SECTION 2: HAZARDS IDENTIFICATION

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
Label elements:
CLP Regulation (EC) No 1272/2008:
Labelling of packages where the contents do not exceed 125 ml:
Warning
Hazard statements:
Non-applicable
Precautionary statements:
Non-applicable
UFI: 8F00-V07R-Q00C-4U82
Other hazards:
Product does not meet PBT/vPvB criteria Endocrine-disrupting properties: The product does not meet the criteria.

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances **Components:**

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

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Safety data sheet legislation

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)								
Identification	Identification Chemical name/Classification Concentration							
CAS: 64-17-5	ethanol ⁽¹⁾		ATP CLP00					
EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43- XXXX	Regulation 1272/2008	Flam. Liq. 2: H225 - Danger		5 - <20 %				
⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878								
To obtain more informat	To obtain more information on the hazards of the substances consult sections 11, 12 and 16.							

** Changes with regards to the previous version

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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eve contact:

This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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.

Special hazards arising from the substance or mixture: 5.2

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.

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Date of compilation: 19/09/2023 Revised: 13/03/2024 Version: 4 (Replaced 3) 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. Methods and material for containment and cleaning up: 6.3 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:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

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:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

There are no applicable occupational exposure limits for the substances contained in the product

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/m³	Non-applicable

DNEL (General population):

		Short e	xposure	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/m³	Non-applicable

PNEC:

Identification				
ethanol	STP	580 mg/L	Fresh water	0,96 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 water)	3,6 mg/kg
	Oral	0,38 g/kg	Sediment (Marine water)	2,9 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				

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	Pictogram		PPE	Labelling		CEN Standard		Remarks
	Mandatory complete body protection		tic and fireproof ective clothing		E	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 N ISO 14116:2015 EN 1149-5:2018		Limited protection against flames.
	Mandatory foot protection	antistatic	/ footwear with and heat resistant properties			N ISO 13287:2020 N ISO 20345:2011	Re	place boots at any sign of deterioration.
F	Additional emerge	ency mea	isures					
	Emergency mea	asure	St	andards		Emergency measu	ire	Standards
	Emergency sho	ower		5I Z358-1 11, ISO 3864-4:20)11	Eyewash station	S	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Env	/ironmental exp	osure c	ontrols:					
In a	- accordance with th	ne comm	unity legislation			he environment it in ation see subsection		nmended to avoid environmental

V.O.C. (Supply):	19 % weight
V.O.C. density at 20 °C:	202,88 kg/m ³ (202,88 g/L)
Average carbon number:	2
Average molecular weight:	46,1 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:	
Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Colourless
Odour:	Alcohol
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	94 °C
Vapour pressure at 20 °C:	2804 Pa
Vapour pressure at 50 °C:	14359,41 Pa (14,36 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1067,8 kg/m ³
Relative density at 20 °C:	1,068
Dynamic viscosity at 20 °C:	1,53 cP
Kinematic viscosity at 20 °C:	1,43 mm²/s
Kinematic viscosity at 40 °C:	Non-applicable *
*Not relevant due to the nature of the product, not providing inform	nation property of its hazards.
CONTIN	

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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIE	S (continued)
	Concentration:	Non-applicable *
	pH:	6,8 - 7,2
	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:	38 °C
	Flammability (solid, gas):	Non-applicable *
	Autoignition temperature:	423 °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 clas	ises:
	Explosive properties:	Non-applicable *
	Oxidising properties:	Non-applicable *
	Corrosive to metals:	Non-applicable *
	Heat of combustion:	Non-applicable *
	Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
	Other safety characteristics:	
	Surface tension at 20 °C:	Non-applicable *
	Refraction index:	Non-applicable *
	*Not relevant due to the nature of the product, not providing info	rmation property of its hazards.

	TON 10: STABILITY ANI				
10.1	Reactivity:				
10.2	No hazardous reactions are Safety Data Sheet. Chemical stability:	e expected because the p	roduct is stable under reco	mmended storage condit	ions. See section 7 from
	Chemically stable under th	e indicated conditions of	storage, handling and use.		
L0.3	,				
	Under the specified conditi	ons, hazardous reactions	that lead to excessive tem	peratures or pressure are	e not expected.
L 0.4	Conditions to avoid:				
	Applicable for handling and	l storage at room temper	ature:		
	Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
	Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable
.0.5	Incompatible materials	:			
	Acids	Water	Oxidising materials	Combustible materials	Others

10.6 Hazardous decomposition products:

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MB399 - Buffer NMEL-EF Date of compilation: 19/09/2023 Revised: 13/03/2024 Version: 4 (Replaced 3) SECTION 10: STABILITY AND REACTIVITY (continued) 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 (CO₂), 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 **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, as it does not contain substances classified as hazardous 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, as it does not contain substances classified as hazardous for this effect. For more information see section 3. D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction): - 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, as it does not contain substances classified as hazardous for this effect. 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, as it does not 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, as it does not contain substances classified as hazardous for this effect. 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

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Date of compilation: 19/09/2023 Revised: 13/03/2024 Version: 4 (Replaced 3) SECTION 11: TOXICOLOGICAL INFORMATION ** (continued) Specific toxicology information on the substances: Identification Acute toxicity Genus 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 Acute Toxicity Estimate (ATE mix):

	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 does not meet the criteria.

Other information

Non-applicable

** Changes with regards to the previous version

SECTION 12: ECOLOGICAL INFORMATION **

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

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.

12.1 Toxicity:

Acute toxicity:

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

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	Degra	adability	Biodegradab	ility
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 %

12.3 Bioaccumulative potential:

Substance-specific information:

	Identification	Bioaccur	nulation potential
	ethanol	BCF	3
	CAS: 64-17-5	Pow Log	-0.31
	EC: 200-578-6	Potential	Low
12.4	Mobility in soil:		

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	Identification	Absor	ption/desorption		Volatility
	ethanol	Кос	1	Henry	4,61E-1 Pa·m ³ /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
12.5	Results of PBT and vPvB assessment	:			
	Product does not meet PBT/vPvB criteria				
12.6	Endocrine disrupting properties:				
12.6	Endocrine disrupting properties: Endocrine-disrupting properties: The prod	uct does not meet the	criteria.		
12.6 12.7		uct does not meet the	criteria.		

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

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 **

Other information:

Not restricted under Special Provision A58(144) IATA(ADR).

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

- **14.1 UN number or ID number:** UN1993
- 14.2 UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethanol) 3
- 14.3 Transport hazard class(es):
- Labels: 14.4 Packing group:
- 14.5 Environmental hazards:
- 14.6 Special precautions for user

according to IMO instruments:

- Special regulations:
- 274, 601 Tunnel restriction code: D/E Physico-Chemical properties: Limited quantities:
- see section 9 51 14.7 Maritime transport in bulk Non-applicable

3 III

No

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SECTION 14: TRANSPORT	INFORMATION ** (continued	
Transport of dangero	us goods by sea:	
With regard to IMDG 40	-20:	
14.1	UN number or ID number:	UN1993
	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
14.3	Transport hazard class(es):	3
	Labels:	3
	Packing group: Marine pollutant:	III No
	Special precautions for user	NO
	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
Transport of dangero	us goods by air:	
With regard to IATA/ICA	AO 2023:	
14.1	UN number or ID number:	UN1993
	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
14.3	Transport hazard class(es):	3
3	Labels:	3
· · · · · · · · · · · · · · · · · · ·	Packing group: Environmental hazards:	III No
	Special precautions for user	
110	Physico-Chemical properties:	see section 9
14.7		Non-applicable
14.7	according to IMO instruments:	

** Changes with regards to the previous version

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	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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

Shall not be used in:

--ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

-tricks and jokes,

—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:**

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SECT	ION 15: REGULATORY INFORMATION (continued)				
	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				
15 2	Chemical safety assessment:				
15.2	The supplier has not carried out evaluation of chemical safety.				
SECT	ION 16: OTHER INFORMATION				
JLCI					
	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.: COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12): • New declared substances				
	ethanol (64-17-5) TRANSPORT INFORMATION (SECTION 14): • UN number • Packing group				
	Texts of the legislative phrases mentioned in section 2: H226: Flammable liquid and vapour.				
	Texts of the legislative phrases mentioned in section 3: 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:				
	Flam. Liq. 2: H225 - Highly flammable liquid and vapour.				
	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.

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Interim Interi

ate of	compilation: 13/08/202	20 Revised	: 13/12/2023	Version: 3 (Replaced 2)		
SECT	FION 1: IDENTIFIC	ATION OF THE	SUBSTANCE/	MIXTURE AND OF THE COMPANY/UNDERTAKING		
1.1	Product identifier: MB399 - RNase A (lyophilized)					
		Nuclease, ribo-				
	CAS:	9001-99-4				
	EC:	232-646-6				
	Index:	Non-applicable				
	REACH:	Non-applicable				
	Other means of identification:					
	Non-applicable					
1.2	Relevant identified uses of the substance or mixture and uses advised against:					
	Relevant uses: Laboratory. For professional users only.					
	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:					
	NZYtech, Lda Estrada do Paco do L 1649-038 Lisboa - Lis Phone: +351 213643 info@nzytech.com www.nzytech.com	sboa - Portugal	Lumiar - Edif. E	=, r/c		
1.4	Emergency teleph			enter (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your Information Service or call local Life Saving Service.		

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.

Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Labelling of packages where the contents do not exceed 125 ml:

Danger

Hazard statements:

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P284: Wear respiratory protection.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

2.3 Other hazards:

Product does not meet PBT/vPvB criteria Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

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MB399 - RNase A (lyophilized)

Date of compilation: 13/08/2020 Revised: 13/12/2023 Version: 3 (Replaced 2) SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued) Chemical description: Organic substance **Components:** In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains: Identification Chemical name/Classification

CAS:		Nuclease, ribo-		Self-classified	
EC: Index: REACH:	232-646-6 Non-applicable Non-applicable	Regulation 1272/2008	Resp. Sens. 1: H334 - Danger	٨	100 %

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

3.2 Mixture:

Non-applicable

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:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eye contact:

This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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

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

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

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:

- CONTINUED ON NEXT PAGE -

Concentration

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	genes & enzymes	MB399 - RN	lase A (lyophilized)	
ite of	compilation: 13/08/2020	Revised: 13/12/2023	Version: 3 (Replaced 2)	
SECT	TION 5: FIREFIGHTING N	1EASURES (continued)		
	emergencies. Eliminate all s	ources of ignition. In case of	the Information Sheets on actions to take after an accident or other fire, cool the storage containers and tanks for products susceptible to peratures. Avoid spillage of the products used to extinguish the fire into	an
SEC	TION 6: ACCIDENTAL RE	LEASE MEASURES		
6.1		otective equipment and e	emergency procedures:	
	For non-emergency pers	sonnel:		
		sweeping, etc.) is not recomm	of the product by inhalation, any cleaning method that involves exposurnended	re
	Wear protective equipment	. Keep unprotected persons a	way. See section 8.	
6.2	Environmental precaution	ons:		
	This product is not classifie	d as hazardous to the environ	ment. Keep product away from drains, surface and ground water.	
6.3	Methods and material for	r containment and cleanir	ng up:	
	It is recommended:			
	to the product in this way (sweeping, etc.) is not recomm	of the product by inhalation, any cleaning method that involves exposurnended	re
6.4	Reference to other secti	ons:		
	See sections 8 and 13.			
SEC	TION 7: HANDLING AND	STORAGE		

7.1 Precautions for safe handling:

Da

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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

Due to its non-inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

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:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

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

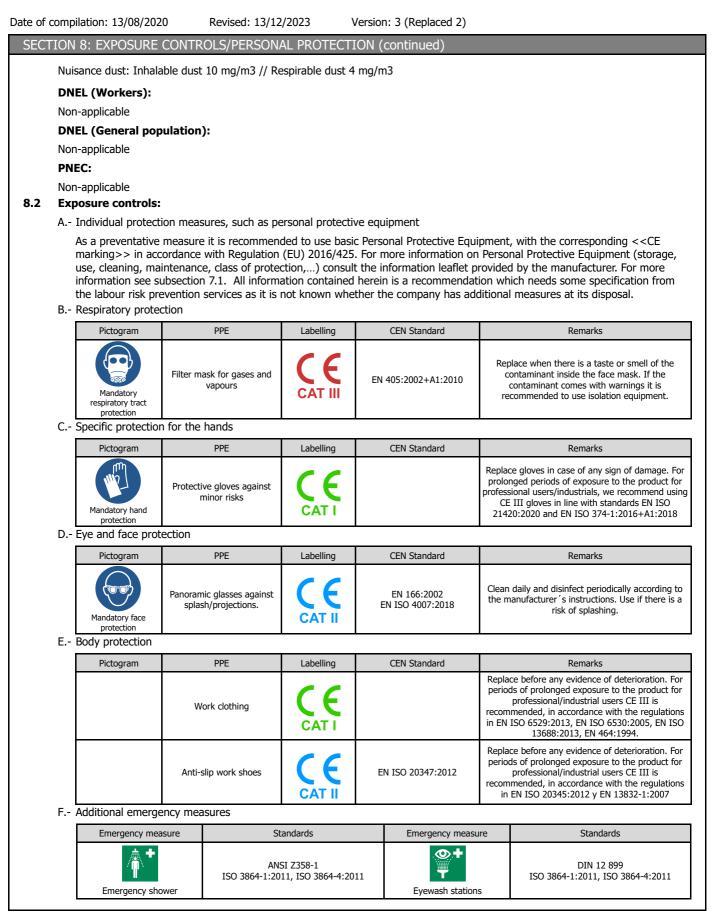
8.1 **Control parameters:**

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

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MB399 - RNase A (lyophilized)

CTION 8: EXPOSURE CONTROLS/PER	SONAL PROTECTION (continued)
Environmental exposure controls:	lation for the protection of the environment it is recommended to avoid environmental
	action for the protection of the environment it is recommended to avoid environmental rainer. For additional information see subsection 7.1.D
• •	is product has the following characteristics:
V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m ³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable
CTION 9: PHYSICAL AND CHEMICAL	PROPERTIES
Information on basic physical and o	chemical properties:
For complete information see the produce	ct datasheet.
Appearance:	
Physical state at 20 °C:	Solid
Appearance:	Not available
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	656 °C
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1400 kg/m³
Relative density at 20 °C:	1,4
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
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:	243 °C
Flammability:	
Flash Point:	351 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECT	TION 9: PHYSICAL AND CHEMICA	L PROPERTIES	(continued)	
	Upper flammability limit:		Non-applicable *	
	Explosive (Solid):			
	Lower explosive limit:		Non-applicable *	
	Upper explosive limit:		Non-applicable *	
	Particle characteristics:			
	Median equivalent diameter:		Non-applicable *	
9.2	Other information:			
	Information with regard to physic	cal hazard class	ses:	
	Explosive properties:		Non-applicable *	
	Oxidising properties:		Non-applicable *	
	Corrosive to metals:		Non-applicable *	
	Heat of combustion:		Non-applicable *	
	Aerosols-total percentage (by mass) o components:	f flammable	Non-applicable *	
	Other safety characteristics:			
	Surface tension at 20 °C:		Non-applicable *	
	Refraction index:		Non-applicable *	
	*Not relevant due to the nature of the product	, not providing inform	mation 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 from Safety Data Sheet.

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:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Not applicable	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

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):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)						
 Acute toxicity: Based on available data, the classification criteria are hazardous for consumption. For more information see section 3 Corrosivity/Irritability: Based on available data, the classification criteriasified as hazardous for this effect. For more information see sectio B- Inhalation (acute effect): 	iteria are not met,					
 Acute toxicity : Based on available data, the classification criteria a as hazardous for inhalation. For more information see section 3. Corrosivity/Irritability: Based on available data, the classification crit classified as hazardous for this effect. For more information see sectio Contact with the skin and the eyes (acute effect): 	iteria are not met,					
 Contact with the skin: Based on available data, the classification criclassified as hazardous for skin contact. For more information see section. Contact with the eyes: Based on available data, the classification criclassified as hazardous for this effect. For more information see section. CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction) 	tion 3. riteria are not met n 3.					
 Carcinogenicity: Based on available data, the classification criteria a as hazardous for the effects mentioned. For more information see sect IARC: Non-applicable Mutagenicity: Based on available data, the classification criteria are hazardous for this effect. For more information see section 3. Reproductive toxicity: Based on available data, the classification criteria classified as hazardous for this effect. For more information see section 5. E- Sensitizing effects: 	tion 3. e not met, as it do teria are not met,	es not contain substar	nces classified as			
	 Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity. 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. 					
Based on available data, the classification criteria are not met, as it do this effect. For more information see section 3. G- Specific target organ toxicity (STOT)-repeated exposure:	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.					
 Specific target organ toxicity (STOT)-repeated exposure: Based on it does not contain substances classified as hazardous for this effect. F Skin: Based on available data, the classification criteria are not met hazardous for this effect. For more information see section 3. H- Aspiration hazard: 	For more informat	ion see section 3.				
Based on available data, the classification criteria are not met, as it do this effect. For more information see section 3. Other information:	oes not contain su	bstances classified as	hazardous for			
Non-applicable						
Specific toxicology information on the substances:						
	1					
Identification Nuclease, ribo-	LD50 oral	>2000 mg/kg	Genus			
CAS: 9001-99-4	LD50 dermal	>2000 mg/kg				
CA3, 5001-55-4	LC50 inhalation	>5 mg/L				
EC: 232-646-6						
EC: 232-646-6 11.2 Information on other hazards:						
EC: 232-646-6						

Non-applicable

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SECTI	ION 12: ECOLOGICAL INFORMATION
	on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. re information see section 3.
	Toxicity:
	Not available
12.2	Persistence and degradability:
	Not available
12.3	Bioaccumulative potential:
	Not available
12.4	Mobility in soil:
	Not available
12.5	Results of PBT and vPvB assessment:
	Product does not meet PBT/vPvB criteria
12.6	Endocrine disrupting properties:
	Endocrine-disrupting properties: The product does not meet the criteria.
12.7	Other adverse effects:
	Not described
CECTI	
SECII	ION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 03 05*	organic wastes containing hazardous substances	Dangerous

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

HP13 Sensitising

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 2023 and RID 2023:

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SECTION 14: T	RANSPORT INFORMATION (continued)	
14.1	UN number or ID number:	Non-applicable	
14.2	UN proper shipping name:	Non-applicable	
	Transport hazard class(es):	Non-applicable	
	Labels:	Non-applicable	
14.4	Packing group:	Non-applicable	
	Environmental hazards:	No	
14.6	Special precautions for user		
	Special regulations:	Non-applicable	
	Tunnel restriction code:	Non-applicable	
	Physico-Chemical properties:	see section 9	
	Limited quantities:	Non-applicable	
14.7	Maritime transport in bulk		
	according to IMO	Non-applicable	
	instruments:		
Transpo	rt of dangerous goods by sea:		
With rega	ard to IMDG 40-20:		
14.1	UN number or ID number:	Non-applicable	
14.2	UN proper shipping name:	Non-applicable	
	Transport hazard class(es):	Non-applicable	
	Labels:	Non-applicable	
14.4	Packing group:	Non-applicable	
	Marine pollutant:	No	
	Special precautions for user		
	Special regulations:	Non-applicable	
	EmS Codes:		
	Physico-Chemical properties:	see section 9	
	Limited quantities:	Non-applicable	
	Segregation group:	Non-applicable	
14.7	Maritime transport in bulk	Non-applicable	
	according to IMO		
	instruments:		
Transpo	rt of dangerous goods by air:		
With rega	ard to IATA/ICAO 2023:		
14.1	UN number or ID number:	Non-applicable	
14.2	UN proper shipping name:	Non-applicable	
14.3	Transport hazard class(es):	Non-applicable	
	Labels:	Non-applicable	
14.4	Packing group:	Non-applicable	
	Environmental hazards:	No	
14.6	Special precautions for user		
	Physico-Chemical properties:	see section 9	
14.7	Maritime transport in bulk	Non-applicable	
	according to IMO		
	instruments:		

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: Non-applicable

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Date of compilation: 13/08/2020 Revised: 13/12/2023 Version: 3 (Replaced 2) SECTION 15: REGULATORY INFORMATION (continued) REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable Seveso III: Non-applicable Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc): Non-applicable 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 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: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Texts of the legislative phrases mentioned in section 3: 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: Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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 o 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. - END OF SAFETY DATA SHEET -

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	ION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier: MB399 - Buffer NMW2-EF
	Other means of identification:
	Non-applicable
1.2	Relevant identified uses of the substance or mixture and uses advised against:
	Relevant uses: Laboratory. For professional users only.
	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:
	NZYtech, Lda Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal Phone: +351 213643514 info@nzytech.com www.nzytech.com
1.4	Emergency telephone number: National Poison Center (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your regional Poisons Information Service or call local Life Saving Service.
	TON 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:
	CLP Regulation (EC) No 1272/2008:
	Warning

Hazard statements:

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

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- P233: Keep container tightly closed.
- P240: Ground and bond container and receiving equipment.
- P241: Use explosion-proof equipment.
- 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 contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

UFI: 3M00-V0MJ-A00C-FHE6

2.3 Other hazards:

Product does not meet PBT/vPvB criteria Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

3.2 Mixture:

** Changes with regards to the previous version

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SECTION 3: COMPOSITIO	N/INFORMATION	ON INGREDIENTS ** (continue	ed)	
Chemical description	: Mixture of substan	ices		
Components:				
In accordance with Ann	ev II of Regulation (F	EC) No 1907/2006 (point 3), the produ	uct containc:	
Identification		Chemical name/Classificatio		Concentration
Identification CAS: 64-17-5	ethanol ⁽¹⁾			Concentration
Identification			n	Concentration 5 - <20 %

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

** Changes with regards to the previous version

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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

By eye contact:

This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes. By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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

Extinguishing media: 5.1

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.

Special hazards arising from the substance or mixture: 5.2

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:

Safety data sheet legislation

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SECT	ION 5: FIREFIGHTING MEASURES (continued)
	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.
SECT	ION 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:
<i>с</i>	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	See sections 8 and 13.
	See sections 8 and 13.
SECT	ION 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:

- A.- Technical measures for storage
 - Store in a cool, dry, well-ventilated location
- 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):

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SECTION 7: HANDLING AND STORAGE (continued)

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):

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

		Short e	xposure	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/m³	Non-applicable

DNEL (General population):

		Short e	xposure	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/m³	Non-applicable

PNEC:

Identification				
ethanol	STP	580 mg/L	Fresh water	0,96 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 water)	3,6 mg/kg
	Oral	0,38 g/kg	Sediment (Marine water)	2,9 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.

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CTION	N 8: EXPOSURE	CONTROLS/PERSO	NAL PROTECT	ION (con	tinued)		
E	Body protection						
	Pictogram	PPE	Labelling	CEN	l Standard		Remarks
	Mandatory complete body protection	Antistatic and fireproof protective clothing	CAT III	EN 1 EN 1 EN EN ISC	149-1:2006 149-2:1997 149-3:2004 168:2002 0 14116:2015 149-5:2018		Limited protection against flames.
	Mandatory foot protection	Safety footwear with antistatic and heat resistan properties) 13287:2020) 20345:2011	Re	place boots at any sign of deteriorati
F	Additional emerge	ency measures	- 1				
	Emergency mea	asure	Standards		Emergency measu	ire	Standards
	Emergency sho	ISO 3864-1:2	NSI Z358-1 2011, ISO 3864-4:20	11	Eyewash stations	s	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2
Fn	vironmental exp	•			,		
	V.O.C. (Supply): V.O.C. density at	19 ° 20 °C: 193	% weight ,29 kg/m ³ (193,	-	racteristics:		
	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL A	19 9 20 °C: 193 umber: 2 r weight: 46,: AND CHEMICAL PRO	% weight ,29 kg/m ³ (193, 1 g/mol DPERTIES	29 g/L)	racteristics:		
In For	V.O.C. density at Average carbon n Average molecula V 9: PHYSICAL A formation on bas r complete informa	19 9 20 °C: 193 umber: 2 r weight: 46,3	% weight ,29 kg/m ³ (193, 1 g/mol PPERTIES nical properties	29 g/L)	iracteristics:	_	
Inf For Ap	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL A	19 0 20 °C: 193 umber: 2 r weight: 46,3 AND CHEMICAL PRO sic physical and chem tion see the product da	% weight ,29 kg/m ³ (193, 1 g/mol PPERTIES nical properties	29 g/L)	racteristics:		
Inf For Ap Phy	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL A formation on bas r complete informa opearance:	19 0 20 °C: 193 umber: 2 r weight: 46,3 AND CHEMICAL PRO sic physical and chem tion see the product da	% weight ,29 kg/m ³ (193, 1 g/mol DPERTIES nical properties itasheet. Liqui	29 g/L)	racteristics:	_	
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Inf For App Phy Col Od Od Od Do Boi Vap	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL A formation on base r complete informator pearance: ysical state at 20 ° pearance: lour: lour: lour threshold: olatility: illing point at atmost pour pressure at 20	19 0 20 °C: 193 umber: 2 r weight: 46,: AND CHEMICAL PRC sic physical and chem tion see the product da C: spheric pressure: 0 °C:	% weight ,29 kg/m ³ (193, 1 g/mol PERTIES nical properties itasheet. Liqui Not a Colo Alcol Non- 95 % 2747	29 g/L) s: id available urless hol -applicable C 7 Pa	*		
Inf For App Phy Col Od Od Od Od Boi Vap Vap	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL A formation on bas r complete informa opearance: ysical state at 20 ° pearance: lour: lour: lour: lour threshold: olatility: iling point at atmos pour pressure at 20 pour pressure at 20	19 0 20 °C: 193 umber: 2 r weight: 46,: AND CHEMICAL PRC sic physical and chem tion see the product da C: spheric pressure: 0 °C: 0 °C:	% weight ,29 kg/m ³ (193, 1 g/mol PERTIES nical properties itasheet. Liqui Not ; Colo Alcol Non- 95 % 2747 1411	29 g/L) s: id available urless hol applicable C 7 Pa 10,3 Pa (1-	* 4,11 kPa)		
Inf For Ap Phy Col Od Od Od Od Vo Boi Va Va Va Va Eva	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL / formation on bas r complete informa opearance: ysical state at 20 ° pearance: lour: lour: lour: lour threshold: olatility: illing point at atmos pour pressure at 20 pour pressu	19 0 20 °C: 193 umber: 2 r weight: 46,3 AND CHEMICAL PRO sic physical and chem tion see the product da C: spheric pressure: 0 °C: 0 °C: 0 °C:	% weight ,29 kg/m ³ (193, 1 g/mol PERTIES nical properties itasheet. Liqui Not ; Colo Alcol Non- 95 % 2747 1411	29 g/L) s: id available urless hol -applicable C 7 Pa	* 4,11 kPa)		
Inf For App Phy Col Od Od Od Boi Boi Vap Vap Eva Cap	V.O.C. density at Average carbon n Average molecula N 9: PHYSICAL 4 formation on bas r complete informa opearance: ysical state at 20 ° pearance: lour: lour: lour threshold: olatility: iling point at atmos pour pressure at 24 pour pressure at 24	19 0 20 °C: 193 umber: 2 r weight: 46,3 AND CHEMICAL PRO sic physical and chem tion see the product da C: spheric pressure: 0 °C: 0 °C: 0 °C:	% weight ,29 kg/m ³ (193, 1 g/mol PERTIES nical properties itasheet. Liqui Not a Colo Alcol Non- 95 % 2747 1411 Non-	29 g/L) s: id available urless hol applicable C 7 Pa 10,3 Pa (1: applicable	* 4,11 kPa)		
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Date of	compilation: 19/09/2023 R	Revised: 13/03/2024	Version: 4 (Replaced 3)	
SEC	FION 9: PHYSICAL AND CHEN	MICAL PROPERTIES	(continued)	
	Kinematic viscosity at 40 °C:		Non-applicable *	
	Concentration:		Non-applicable *	
	pH:		6 - 6,5	
	Vapour density at 20 °C:		Non-applicable *	
	Partition coefficient n-octanol/wa	ater 20 ºC:	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:		38 °C	
	Flammability (solid, gas):		Non-applicable *	
	Autoignition temperature:		423 °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 p	physical hazard class		
	Explosive properties:		Non-applicable *	
	Oxidising properties:		Non-applicable *	
	Corrosive to metals:		Non-applicable *	
	Heat of combustion:		Non-applicable *	
	Aerosols-total percentage (by ma components:		Non-applicable *	
	Other safety characteristics:			
	Surface tension at 20 °C:		Non-applicable *	
	Refraction index:		Non-applicable *	
	*Not relevant due to the nature of the p	product, not providing inform	nation 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 from Safety Data Sheet.

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:

Applicable for handling and storage at room temperature:

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

10.5 Incompatible materials:

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

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SECTION 10: STABILITY AND REACTIVITY (continued)

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 (CO₂), 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

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, as it does not contain substances classified as hazardous 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, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - 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, as it does not contain substances classified as hazardous for this effect. 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, as it does not 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, as it does not contain substances classified as hazardous for this effect. 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:

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Non-applicable								
Specific toxicology information on the substances:								
	Identification		Acute toxicity	Genus				
ethanol		LD50 oral	6200 mg/kg	Rat				
CAS: 64-17-5		LD50 dern	nal 20000 mg/kg	Rabbit				
EC: 200-578-6		LC50 inha	lation 124,7 mg/L (4 h)	Rat				
Acute Toxicity Estim	ate (ATE mix):	-						
	ATE mix		Ingredient(s) of unknow	wn toxicity				
Oral	>2000 mg/kg (Calculation	on method)	Non-applicable					
Dermal	>2000 mg/kg (Calculation	on method)	Non-applicable Non-applicable					
Inhalation	>20 mg/L (4 h) (Calcula	tion method)						
2 Information on othe	r hazards:							
F . J J J J	properties							
Endocrine disrupting	Endocrine-disrupting properties: The product does not meet the criteria.							

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SECTION 12: ECOLOGICAL INFORMATION **

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

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.

12.1 Toxicity:

Acute toxicity:

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

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	Degra	adability	Biodegradab	ility
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 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification		Bioaccum	ulation potential
ethanol	BCF		3
CAS: 64-17-5	Pow L	Log	-0.31
EC: 200-578-6	Potent	ential	Low
L2.4 Mobility in soil:			

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	TION 12: ECOLOGICAL INFORMAT	TON ** (continued)			
	Identification	Abso	rption/desorption		Volatility
	ethanol	Кос	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
12.5	Results of PBT and vPvB assessme	ent:			
	Product does not meet PBT/vPvB crite	ria			
12.6	,	ria			
12.6	,		criteria.		
12.6 12.7	Endocrine disrupting properties: Endocrine-disrupting properties: The p		criteria.		

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

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 **

Other information:

Not restricted under Special Provision A58(144) IATA(ADR).

Transport of dangerous goods by land: With regard to ADR 2023 and RID 2023:

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 III 14.4 Packing group: 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: 51 14.7 Maritime transport in bulk Non-applicable according to IMO instruments:

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SECTION 14: TRANSPORT	INFORMATION ** (continuec	
Transport of dangero	ous goods by sea:	
With regard to IMDG 40)-20:	
14.1	UN number or ID number:	UN1993
	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
14.3	Transport hazard class(es):	3
	Labels:	3
	Packing group:	III
J	Marine pollutant:	No
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
Transport of dangero	ous goods by air:	
With regard to IATA/ICA	AO 2023:	
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
3	Labels:	3
· · · · · · · · · · · · · · · · · · ·	Packing group: Environmental hazards:	III No
	Special precautions for user	NO .
14.0	Physico-Chemical properties:	see section 9
	, , , ,	
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable

** Changes with regards to the previous version

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	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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

Shall not be used in:

-ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

-tricks and jokes,

—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:**

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DECI	ION 15: REGULATORY INFORMATION (COntinued)						
	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						
15.2	Chemical safety assessment:						
	The supplier has not carried out evaluation of chemical safety.						
SECT	ION 16: OTHER INFORMATION						
JECT	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.: COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):						
	 New declared substances ethanol (64-17-5) TRANSPORT INFORMATION (SECTION 14): UN number 						
	Packing group Texts of the legislative phrases mentioned in section 2:						
	H226: Flammable liquid and vapour.						
	Texts of the legislative phrases mentioned in section 3:						
	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:						
	Flam. Liq. 2: H225 - Highly flammable liquid and vapour.						
	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.

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ate of o	compilation: 19/09/2023 Rev	rised: 13/03/2024	Version: 4 (Replaced 3)
SECT	TION 1: IDENTIFICATION OF T	HE SUBSTANCE/M	IXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier:	MB399 - Buffer	NMW1-EF
	Other means of identification:		
	Non-applicable		
1.2	Relevant identified uses of the	substance or mixtu	re and uses advised against:
	Relevant uses: Laboratory. For pro	fessional users only.	
	Uses advised against: All uses not	specified in this sectio	n or in section 7.3
1.3	Details of the supplier of the s	afety data sheet:	
	NZYtech, Lda Estrada do Paco do Lumiar Campu 1649-038 Lisboa - Lisboa - Portuga Phone: +351 213643514 info@nzytech.com www.nzytech.com		/c
1.4	Emergency telephone number		ter (Portugal) CIAV: +351 800 250 250; Outside Portugal: Call your ormation Service or call local Life Saving Service.

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.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412 Eye Irrit. 2: Eye irritation, Category 2, H319 Flam. Liq. 3: Flammable liquids, Category 3, H226

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects. Eye Irrit. 2: H319 - Causes serious eye irritation. Flam. Liq. 3: H226 - Flammable liquid and vapour.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/protective footwear.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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 contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

UFI: HH00-C0X5-000V-T5U4

2.3 Other hazards:

Product does not meet PBT/vPvB criteria The product contains substances with endocrine-disrupting properties: Polyethylene glycol mono(octylphenyl) ether

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

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		ION/INFORMATION		BIENTS (CC	Jitiliaca				
1	Substance:								
	Non-applicable								
2	Mixture:								
	Chemical description: Mixture of substances								
	Components:								
	•	nnex II of Regulation (I	FC) No 1907/2	2006 (point 3), t	he product conta	ins:			
	Identification			Chemical name/C			Concentration		
	CAS: 64-17-5	ethanol ⁽¹⁾		chemical hame/c		ATP CLP00	Concentration		
	EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43 XXXX								
	CAS: 9036-19-5	Polyethylene glycol	mono(octylphe	enyl) ether ⁽²⁾		Self-classifie	ed		
	EC: 935-231-4 Index: Non-applicable REACH: Non-applicable								
	 ⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878 ⁽²⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878 To obtain more information on the hazards of the substances consult sections 11, 12 and 16. Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in a with Annex I to that Regulation: 								
		Identification			A	Acute toxicity	Genus		
	Polyethylene glycol mono	o(octylphenyl) ether			LD50 oral	500 mg/kg (ATEi)			
	CAS: 9036-19-5				LD50 dermal	Non-applicable			
	EC: 935-231-4				LC50 inhalation	Non-applicable			

LTION 4: FIRST AID MEASUR

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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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

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Date of compilation: 19/09/2023 Revised: 13/03/2024 Version: 4 (Replaced 3) 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: 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.

Environmental precautions: 6.2

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

Methods and material for containment and cleaning up: 6.3

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

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	compilation: 19/09/2023 Revis		ersion: 4 (Replace					
SEC	TION 7: HANDLING AND STORAG	se (continued)						
	Transfer in well ventilated areas, sparks,) and ventilate during cl inertization systems where possil possibility of electrostatic charges clothes made of acrylic fibres, pro- requirements for equipment and protecting the security and health 10 for conditions and materials th C Technical recommendations on g Do not eat or drink during the pr D Technical recommendations to pr Due to the danger of this produc control barriers in case of spillage	eaning operations. Avoid to ble. Transfer at a slow spe s: ensure a perfect equipo eferably wearing cotton cle systems defined in Direction of workers under the sel hat should be avoided. Heneral occupational hygies occess, washing hands after revent environmental risks t for the environment it is	he existence of d ed to avoid the cr tential connectior othing and condu ve 2014/34/EC (<i>P</i> ection criteria of ne erwards with suita recommended to	angerous atmos reation of electro n, always use gro ctive footwear. C ATEX 100) and w Directive 1999/9 able cleaning pro-	oheres inside of static charges bundings, do n omply with the ith the minimu 2/EC (ATEX 13 ducts.	containers, applying . Against the ot wear work e essential security im requirements fo 87). Consult section		
7.2	control barriers in case of spillage, as well as having absorbent material in close proximity. Conditions for safe storage, including any incompatibilities:							
	A Technical measures for storage	•						
	Store in a cool, dry, well-ventilate	ed location						
	B General conditions for storage							
	Avoid sources of heat, radiation,	static electricity and conta	ct with food. For	additional inform	nation see sub	section 10.5		
7.3	Specific end use(s):	,						
	Except for the instructions already sp	pecified it is not necessary	to provide any cr	nocial recommon	dation rogardi			
	TION 8: EXPOSURE CONTROLS/F	·				ng the uses of this		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation):	PERSONAL PROTECTIO	DN nitored in the wo	rkplace (Europea	n OEL, not co	_		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo	PERSONAL PROTECTIO	DN nitored in the wo	rkplace (Europea	n OEL, not co	_		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation):	PERSONAL PROTECTIO	DN nitored in the wo	rkplace (Europea	n OEL, not co	_		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational	PERSONAL PROTECTIO	DN nitored in the wo	rkplace (Europea	n OEL, not co t	_		
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	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol	PERSONAL PROTECTIOn posure limits have to be mo exposure limits for the su Oral	DN nitored in the wo Ibstances contain Short Systemic Non-applicable	rkplace (Europea ed in the produc exposure Local Non-applicable	n OEL, not co t Lo Systemic Non-applicable	untry-specific ng exposure Local Non-applicable		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5	PERSONAL PROTECTIOn posure limits have to be mo exposure limits for the su Oral Dermal	DN nitored in the wo obstances contain Short Non-applicable Non-applicable	rkplace (Europea ed in the produc exposure Local Non-applicable Non-applicable	n OEL, not co t Systemic Non-applicable 343 mg/kg	untry-specific ng exposure Local Non-applicable Non-applicable		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5 EC: 200-578-6	PERSONAL PROTECTIOn posure limits have to be mo exposure limits for the su Oral	DN nitored in the wo Ibstances contain Short Systemic Non-applicable	rkplace (Europea ed in the produc exposure Local Non-applicable	n OEL, not co t Lo Systemic Non-applicable	untry-specific ng exposure Local Non-applicable		
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	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5 EC: 200-578-6 DNEL (General population):	PERSONAL PROTECTIOn posure limits have to be mo exposure limits for the su Oral Dermal	DN nitored in the wo obstances contain Short Non-applicable Non-applicable Short Short	rkplace (Europea ed in the produc exposure Local Non-applicable Non-applicable	n OEL, not co t Systemic Non-applicable 343 mg/kg 950 mg/m ³	untry-specific ng exposure Local Non-applicable Non-applicable ng exposure		
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	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5 EC: 200-578-6 DNEL (General population): Identification ethanol CAS: 64-17-5 EC: 200-578-6	PERSONAL PROTECTION posure limits have to be mo exposure limits for the su Oral Dermal Inhalation Oral Dermal	DN nitored in the wo ubstances contain Short Non-applicable Non-applicable Systemic Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable	rkplace (Europea ed in the produc evosure Local Non-applicable Non-applicable i exposure cexposure Local Non-applicable Non-applicable	n OEL, not co t Systemic Non-applicable 343 mg/kg 950 mg/m ³ Lo Systemic 87 mg/kg 206 mg/kg	untry-specific ng exposure Local Non-applicable Non-applicable ng exposure Local Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable		
	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5 EC: 200-578-6 DNEL (General population): Identification ethanol CAS: 64-17-5 EC: 200-578-6 PNEC:	PERSONAL PROTECTION posure limits have to be mo exposure limits for the su Oral Dermal Inhalation Oral Dermal	DN nitored in the wo ubstances contain Short Non-applicable Non-applicable Systemic Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable	rkplace (Europea ed in the produc evosure Local Non-applicable Non-applicable i exposure cexposure Local Non-applicable Non-applicable	n OEL, not co t Systemic Non-applicable 343 mg/kg 950 mg/m ³ Lo Systemic 87 mg/kg 206 mg/kg	untry-specific ng exposure Local Non-applicable		
<u>SEC</u> 8.1	TION 8: EXPOSURE CONTROLS/F Control parameters: Substances whose occupational expo legislation): There are no applicable occupational DNEL (Workers): Identification ethanol CAS: 64-17-5 EC: 200-578-6 DNEL (General population): Identification ethanol CAS: 64-17-5 EC: 200-578-6 PNEC: Identification	PERSONAL PROTECTION Desure limits have to be modelexposure limits for the subsect of the subsect	DN nitored in the wo ubstances contain Short Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable	rkplace (Europea ed in the produc evosure Local Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable	n OEL, not co t Non-applicable 343 mg/kg 950 mg/m ³ Lo Systemic 87 mg/kg 206 mg/kg 114 mg/m ³	untry-specific ng exposure Local Non-applicable Non-applicable ng exposure Local Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable Non-applicable		

8.2 Exposure controls:

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

- CONTINUED ON NEXT PAGE -

0,38 g/kg

Sediment (Marine water)

Oral

2,9 mg/kg

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As a marki marki use, o inforr the la	preventative ing>> in acc cleaning, ma nation see si	measure cordance intenanc ubsectior evention	e it is recommend with Regulation e, class of protec n 7.1. All informa	ded to use basic (EU) 2016/425. tion,) consult ation contained	For more information of the information leaflet p herein is a recommenda	n Perso provideo tion wh	, with the corresponding < <ce nal Protective Equipment (storage d by the manufacturer. For more nich needs some specification from I measures at its disposal.</ce
The u	ise of protec	tion equi	pment will be ne	cessary if a mis	st forms or if the occupat	ional e	xposure limits are exceeded.
C Speci	fic protection	n for the	hands				
F	Pictogram		PPE	Labelling	CEN Standard		Remarks
	ndatory hand protection	(Material: polyet Breakthr	l protective gloves Linear low-density hylene (LLDPE), ough time: > 480 kness: 0.062 mm)		EN ISO 21420:2020	Repl	ace the gloves at any sign of deterioration
total		d has the	e of several subserved subserved of several subserved several subserved by the several subserved several subser			erial car	n not be calculated in advance with
F	Pictogram		PPE	Labelling	CEN Standard		Remarks
	ndatory face		nic glasses against h/projections.	CAT II	EN 166:2002 EN ISO 4007:2018		daily and disinfect periodically according nanufacturer 's instructions. Use if there is risk of splashing.
E Body	protection						
F	Pictogram		PPE	Labelling	CEN Standard		Remarks
	atory complete dy protection		tic and fireproof ective 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.
	indatory foot protection	antistatic	/ footwear with and heat resistant properties		EN ISO 13287:2020 EN ISO 20345:2011	Re	place boots at any sign of deterioration.
F Addit	ional emerge	ency mea	sures				
E	Emergency mea	asure	Sta	andards	Emergency meas	ure	Standards
	*			5I Z358-1 11, ISO 3864-4:20		15	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
	Emergency sho	ower			Eyewash station		

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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIES	5						
9.1	.1 Information on basic physical and chemical properties:							
	For complete information see the product datasheet.							
	Appearance:							
	Physical state at 20 °C:	Liquid						
	Appearance:	Not available						
	Colour:	Colourless						
	Odour:	Alcohol						
	Odour threshold:	Non-applicable *						
	Volatility:							
	Boiling point at atmospheric pressure:	94 °C						
	Vapour pressure at 20 °C:	2759 Pa						
	Vapour pressure at 50 °C:	14164,19 Pa (14,16 kPa)						
	Evaporation rate at 20 °C:	Non-applicable *						
	Product description:							
	Density at 20 °C:	1016,5 kg/m³						
	Relative density at 20 °C:	1,017						
	Dynamic viscosity at 20 °C:	Non-applicable *						
	Kinematic viscosity at 20 °C:	Non-applicable *						
	Kinematic viscosity at 40 °C:	Non-applicable *						
	Concentration:	Non-applicable *						
	pH:	6 - 6,5						
	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:	38 °C						
	Flammability (solid, gas):	Non-applicable *						
	Autoignition temperature:	423 °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 clas							
	Explosive properties:	Non-applicable *						
	Oxidising properties:	Non-applicable *						
1	Corrosive to metals:	Non-applicable *						
1	Heat of combustion:	Non-applicable *						
	Aerosols-total percentage (by mass) of flammable components:	Non-applicable *						
1	Other safety characteristics:							
	*Not relevant due to the nature of the product, not providing information property of its hazards.							

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	CTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)						
	Surface tension at 20 °C:		Non-applicable *				
	Refraction index:		Non-applicable *				
*Not relevant due to the nature of the product, not providing information property of its hazards.							
SECT	TON 10: STABILITY AND) REACTIVITY					
10.1	Reactivity:						
10.2	No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet. Chemical stability:						
Chemically stable under the indicated conditions of storage, handling and use.							
	3 Possibility of hazardous reactions:						
10.3	1		storage, nanaling and user				
10.3	Possibility of hazardous	reactions:	s that lead to excessive tem	peratures or pressure are	e not expected.		
	Possibility of hazardous Under the specified condition	reactions:		peratures or pressure are	e not expected.		
	Possibility of hazardous Under the specified condition	reactions: ons, hazardous reaction	s that lead to excessive tem	peratures or pressure ar	e not expected.		
	Possibility of hazardous Under the specified condition Conditions to avoid:	reactions: ons, hazardous reaction	s that lead to excessive tem	peratures or pressure ard Sunlight	e not expected. Humidity		
10.3 10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and	reactions: ons, hazardous reaction storage at room tempe	s that lead to excessive temperature:				
10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and Shock and friction	reactions: ons, hazardous reaction storage at room tempe Contact with air Not applicable	s that lead to excessive tem erature: Increase in temperature	Sunlight	Humidity		
10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and Shock and friction Not applicable	reactions: ons, hazardous reaction storage at room tempe Contact with air Not applicable	s that lead to excessive tem erature: Increase in temperature	Sunlight	Humidity		

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

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. However, it does 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. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

** Changes with regards to the previous version

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ON 11: TOXICOLOG	ICAL INFORMATION ** (continued)			
	Based on available data, the classification criteria are not met, as it does not co effects mentioned. For more information see section 3.	ntain substances class		
 Mutagenicity: Bas hazardous for this ef Reproductive toxi 	ed on available data, the classification criteria are not met, as it does not conta fect. For more information see section 3. city: Based on available data, the classification criteria are not met, as it does r us for this effect. For more information see section 3.			
 Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified a 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. Specific target organ toxicity (STOT) - single exposure: 				
 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. 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 it does not 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, as it does not contain substances classified as hazardous for this effect. For more information see section 3. H- Aspiration bazard: 				
- Skin: Based on av	vailable data, the classification criteria are not met, as it does not contain subst			
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d 	vailable data, the classification criteria are not met, as it does not contain subst	ances classified as		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more 	vailable data, the classification criteria are not met, as it does not contain substifiect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances cla	ances classified as		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable 	vailable data, the classification criteria are not met, as it does not contain substifiect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances cla	ances classified as		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable 	vailable data, the classification criteria are not met, as it does not contain subst fect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances cla information see section 3.	ances classified as		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable 	railable data, the classification criteria are not met, as it does not contain substifiect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances clainformation see section 3. formation on the substances:	ances classified as assified as hazardous Gen		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable Specific toxicology in 	vailable data, the classification criteria are not met, as it does not contain substrated. For more information see section 3. lata, the classification criteria are not met, as it does not contain substances clainformation see section 3. formation on the substances: Identification Acute toxicity	ances classified as assified as hazardous Gen Gg Ra		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable Specific toxicology in ethanol 	vailable data, the classification criteria are not met, as it does not contain substrate. fect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances classification see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k	ances classified as assified as hazardous g Gen (g Ra /kg Rab		
 Skin: Based on av hazardous for this ef H- Aspiration hazard: Based on available d this effect. For more Other information: Non-applicable Specific toxicology in ethanol CAS: 64-17-5 	vallable data, the classification criteria are not met, as it does not contain substrate. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances clainformation see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k LD50 dermal 20000 mg/k LC50 inhalation 124,7 mg/k	ances classified as assified as hazardous g Gen (g Ra /kg Rab L (4 h) Ra		
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 Skin: Based on av hazardous for this eff H- Aspiration hazard: Based on available of this effect. For more Other information: Non-applicable Specific toxicology in ethanol CAS: 64-17-5 EC: 200-578-6 Polyethylene glycol mono(oc CAS: 9036-19-5 	railable data, the classification criteria are not met, as it does not contain substrates. ata, the classification criteria are not met, as it does not contain substances clainformation see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k LD50 dermal 20000 mg/k tylphenyl) ether LD50 oral 500 mg/kg LD50 dermal >2000 mg/kg	ances classified as assified as hazardous assified as hazardous (kg Rat L (4 h) Ra a (ATEi) (kg		
 Skin: Based on av hazardous for this eff H- Aspiration hazard: Based on available of this effect. For more Other information: Non-applicable Specific toxicology in ethanol CAS: 64-17-5 EC: 200-578-6 Polyethylene glycol mono(oc CAS: 9036-19-5 EC: 935-231-4 	railable data, the classification criteria are not met, as it does not contain substrates. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances classification see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k LD50 dermal 20000 mg/k LD50 dermal 20000 mg/kg LD50 dermal 500 mg/kg LD50 dermal >20000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >20000 mg/kg LD50 dermal >2000 mg/kg LD50 mg/kg LD50 dermal >2000 mg/kg LD50 mg/kg LD50 mg/kg L	ances classified as assified as hazardous assified as hazardous (kg Rat L (4 h) Ra a (ATEi) (kg		
 Skin: Based on av hazardous for this eff H- Aspiration hazard: Based on available of this effect. For more Other information: Non-applicable Specific toxicology in ethanol CAS: 64-17-5 EC: 200-578-6 Polyethylene glycol mono(oc CAS: 9036-19-5 EC: 935-231-4 	railable data, the classification criteria are not met, as it does not contain substrates. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances classification see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k LD50 dermal 20000 mg/k LD50 dermal 20000 mg/kg LD50 dermal 500 mg/kg LD50 dermal >20000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >2000 mg/kg LD50 dermal >20000 mg/kg LD50 dermal >2000 mg/kg LD50 mg/kg LD50 dermal >2000 mg/kg LD50 mg/kg LD50 mg/kg L	ances classified as assified as hazardous assified as hazardous (g Ra (kg Rab (L (4 h) Ra (ATEI)) (kg Cable (ATEI)) (ATEI) (ATE		
 Skin: Based on available of this effect. For more Other information: Non-applicable Specific toxicology in ethanol CAS: 64-17-5 EC: 200-578-6 Polyethylene glycol mono(occ CAS: 9036-19-5 EC: 935-231-4 Acute Toxicity Estimation 	valiable data, the classification criteria are not met, as it does not contain substances fect. For more information see section 3. ata, the classification criteria are not met, as it does not contain substances classification see section 3. formation on the substances: Identification Acute toxicity LD50 oral 6200 mg/k LD50 dermal 20000 mg/k tylphenyl) ether LD50 oral 500 mg/kg LD50 dermal >2000 mg/kg LD50 de	ances classified as assified as hazardous assified as hazardous (g Ra (kg Rab (L (4 h) Ra (ATEI)) (kg Cable (ATEI)) (ATEI) (ATE		

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Non-applicable

** Changes with regards to the previous version

SECTION 12: ECOLOGICAL INFORMATION **

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

Harmful to aquatic life with long lasting effects.

** Changes with regards to the previous version

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	ION 12: ECOLOGICAL INFORMATIO	. (
.2.1	Toxicity:									
	Acute toxicity: Identification			Concentration		Spec	ries	Genus		
	ethanol		LC50	11000 mg/L (96 h)		Alburnus a		Fish		
	CAS: 64-17-5		EC50	9268 mg/L (48 h)		Daphnia		Crustacea		
	EC: 200-578-6		EC50	1450 mg/L (192 h)		Microcystis a	5	Algae		
	Polyethylene glycol mono(octylphenyl) ether			>0.1 - 1 mg/L (96 h)			-	Fish		
	CAS: 9036-19-5			>0.1 - 1 mg/L (48 h)				Crustacea		
	EC: 935-231-4		EC50	>0.1 - 1 mg/L (72 h)				Algae		
	Chronic toxicity:			-		-				
	Identification			Concentration		Spec	cies	Genus		
	ethanol		NOEC	250 mg/L		Danio	rerio	Fish		
	CAS: 64-17-5 EC: 200-578-6		NOEC	2 mg/L		Ceriodaphi	nia dubia	Crustacea		
2.2	Persistence and degradability:									
	Substance-specific information:									
	Identification		De	egradability		Biod	degradability			
	ethanol	BO)D5	Non-applicable	Conce	entration	100) mg/L		
	CAS: 64-17-5	CO	D	Non-applicable	Perio	d	14	days		
	EC: 200-578-6	BO	D5/COD	Non-applicable	% Bio	odegradable	89	%		
	Identi			BC		umulation pot	ellua			
	ethanol			BC		3				
	CAS: 64-17-5					w Log	-0.31			
2.4	EC: 200-578-6				Pot	tential	Low			
.2.4	Mobility in soil:									
	Identification			sorption/desorption			Volatility			
	ethanol	Ko		1		Henry		1E-1 Pa·m³/mol		
	CAS: 64-17-5 EC: 200-578-6		nclusion Irface tensior	, 5			Dry soil Yes Moist soil Yes			
.2.5				1 2,335L-2 N/III (2	<u> </u>	110151 5011	165			
2.5		•								
	Product does not meet PBT/vPvB criteria									
2.6	Endocrine disrupting properties:									
	Contains Polyethylene glycol mono(octylphenyl) ether. A substance shall be considered as having endocrine-disrupting properties that may cause adverse effects on non-target organisms if: (a) it shows an adverse effect in non-target organisms, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)populatio that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences									
	 (b) it has an endocrine mode of action, i. (c) the adverse effect is a consequence o Other adverse effects: 	e. it alters			rine sys	stem				
2.7	Not described									

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

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Revised: 13/03/2024

Version: 4 (Replaced 3)

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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

HP14 Ecotoxic, HP3 Flammable

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 **

Other informa			
	•	ecial Provision A58(144) IATA(ADR	.).
-	-	us goods by land:	
With regard to	ADR 202	23 and RID 2023:	
		UN number or ID number:	UN1993
		UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
	14.3	Transport hazard class(es):	3
$\langle - \rangle$		Labels:	3
2		Packing group:	III
		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	Non-applicable
		instruments:	
Transport of d	angero	us goods by sea:	
-	-		
With regard to I			
		UN number or ID number:	UN1993
		UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (ethanol)
Jele .	14.3	Transport hazard class(es):	3
		Labels:	7
			3
$\langle \mathbf{e} \rangle$		Packing group:	III
	14.5	Marine pollutant:	
3	14.5	Marine pollutant: Special precautions for user	III No
	14.5	Marine pollutant: Special precautions for user Special regulations:	III No 274, 223, 955
	14.5	Marine pollutant: Special precautions for user Special regulations: EmS Codes:	III No 274, 223, 955 F-E, S-E
	14.5	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties:	III No 274, 223, 955 F-E, S-E see section 9
	14.5	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities:	III No 274, 223, 955 F-E, S-E see section 9 5 L
	14.5 14.6	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group:	III No 274, 223, 955 F-E, S-E see section 9 5 L Non-applicable
	14.5 14.6	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Maritime transport in bulk	III No 274, 223, 955 F-E, S-E see section 9 5 L
	14.5 14.6	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Maritime transport in bulk according to IMO	III No 274, 223, 955 F-E, S-E see section 9 5 L Non-applicable
Transport of d	14.5 14.6 14.7	Marine pollutant: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Maritime transport in bulk	III No 274, 223, 955 F-E, S-E see section 9 5 L Non-applicable

** Changes with regards to the previous version

Safety data sheet legislation

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Date of compilation: 19/09/2023		Revised: 13/03/2024	Version: 4 (Replaced 3)
SECTION 14: TRANSPO	ORT I	INFORMATION ** (continued	i)
	14.2 14.3 14.4 14.5	UN number or ID number: UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user	UN1993 FLAMMABLE LIQUID, N.O.S. (ethanol) 3 3 III No
:	14.7	Physico-Chemical properties: Maritime transport in bulk according to IMO instruments:	see section 9 Non-applicable

** Changes with regards to the previous version

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): Polyethylene glycol mono(octylphenyl) ether

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Polyethylene glycol mono(octylphenyl) ether (04/01/2021)

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	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

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

Shall not be used in:

-ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtravs.

tricks and jokes,

-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

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.:

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Date of compilation: 19/09/2023	Revised: 13/03/2024	Version: 4 (Replaced 3)
SECTION 16: OTHER INFORM	1ATION (continued)	
 New declared substance ethanol (64-17-5) TRANSPORT INFORMATION UN number Packing group 	es I (SECTION 14):	TON 3, SECTION 11, SECTION 12):
	hrases mentioned in sect	tion 2:
H319: Causes serious eye in H412: Harmful to aquatic li H226: Flammable liquid and	e with long lasting effects.	
Texts of the legislative p	hrases mentioned in sect	tion 3:
The phrases indicated do no individual components which	• •	they are present merely for informative purposes and refer to the
CLP Regulation (EC) No	1272/2008:	
Eye Dam. 1: H318 - Causes	/ery toxic to aquatic life with s serious eye damage. flammable liquid and vapour	
Classification procedure	:	
Eye Irrit. 2: Calculation met Aquatic Chronic 3: Calculati Flam. Liq. 3: Calculation me	on method	
Advice related to trainin	g:	
	order to prevent industrial r data sheet, as well as the la	isks for staff using this product and to facilitate their comprehension and bel on the product.
Principal bibliographical	sources:	
http://echa.europa.eu http://eur-lex.europa.eu		
Abbreviations and acron	•	
IMDG: International maritim IATA: International Air Tran ICAO: International Civil Av COD: Chemical Oxygen Der BOD5: 5day biochemical ox BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration EC50: Effective concentration LOgPOW: Octanolwater par Koc: Partition coefficient of	ne dangerous goods code sport Association iation Organisation nand ygen demand r 50 50 50 50 cition coefficient	carriage of dangerous goods by road
UFI: unique formula identifi IARC: International Agency	er	

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.