SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878

FLOIXEM® L

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

1.1. Product identifier **FLOIXEM® L**

UFI: **R123-T314-TD9W-QXFY**

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

Identified use(s): Propylene glycol based antifreeze.

Uses advised against: The product should not be used in any other way different from the ones mentioned in section 1.

1.3. Details of the supplier of the Safety Data Sheet

Company:	**SUCESORES DE CARMELO PÉREZ MARTÍNEZ**
Address:	CALLE DEL TITANIO 15, P.I. PTR
City:	50720 - CARTUJA BAJA
Province:	ZARAGOZA (SPAIN)
Telephone:	+34 634119130
E-mail:	floixem@floixem.com
Website:	www.floixem.com

1.4. Emergency telephone number (24 h) INFOTRAC 1-352-323-3500 (International)

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP):

Not classified.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP):

Not applicable labelling.

2.3. Other hazards

The product contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

The product does not contain endocrine disrupting components that have an effect on human health.

SECTION 3. COMPOSITION/INFORMATION ON COMPONENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical description: Propylene Glycol with corrosion inhibitors.

Components:

Chemical name	CAS No.	EC No.	Content	Symbol(s)	Phrases
Propane-1,2-diol	57-55-6	200-338-0	>90%	Not classified	

See sections 11, 12 and 16 for more information about the dangers of the substances.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Due to the composition and type of substances present in the product, no special warnings are necessary.

If inhaled:
If breathing difficulties occur after inhalation of product in vapour/aerosol form, remove casualty to fresh air, keep warm and at rest, if breathing is irregular or stops, give artificial respiration, remove to fresh air and seek medical attention.

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

On eye contact:
Flush eyes with plenty of water at room temperature for at least 15 minutes. Avoid rubbing or closing the eyes. If the casualty wears contact lenses, these should be removed as long as they are not stuck to the eyes, otherwise additional damage may occur. If symptoms persist, seek medical advice with this Safety Data Sheet.

On accidental ingestion/inhalation:
Rinse the mouth and throat and then drink a maximum of 2 glasses of water (200-300 ml). Keep the affected person at rest. Do not induce vomiting; if vomiting occurs, keep the head tilted forward to avoid aspiration. In case of loss of consciousness, do not administer anything by mouth until medical supervision.

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

The acute or delayed effects are indicated in sections 2 and 11.

4.3. Indication any medical attention and special treatments that should be dispensed immediately

Symptomatic treatment.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

The product is not flammable under normal conditions of storage, handling and use. In case of ignition due to improper handling, storage or use, preferably use multi-purpose powder extinguishers (ABC powder), water spray, carbon dioxide or foam according to local laws.

Unsuitable extinguishing media:

Not relevant.

5.2. Specific hazards arising from the substance or mixture

As a consequence of combustion or thermal decomposition, reaction subproducts are generated, which can be toxic and, therefore, entail a health risk.

5.3. Advise for fire-fighters

Depending on the magnitude of the fire, it could be necessary the use of full protective clothing and a self-contained breathing apparatus. A minimum of emergency installations or response elements (fire blankets, first-aid kit, etc.) should be ready according to local laws.

Additional provisions:

Act according to the Site Emergency Plan and the Fact Sheets about response to accidents and other emergencies. Eliminate any ignition source. In case of fire, refrigerate the containers and storing tanks of products which could ignite, explode or BLEVE as a consequence of high temperatures. Avoid spilling into the aquatic environment the products used for fire extinguishing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency service personnel:

Isolate leaks when it does not entail an additional risk for the persons doing the task. When exposed to a potential product spill, the use of personal protection elements is mandatory (see section 8). Evacuate the area and keep unprotected persons away.

For emergency service personnel:

Always wear protection equipment. Keep unprotected persons away. See section 8.

6.2. Environmental precautions:

Product not classified as dangerous for the environment. Keep product away from drains, surface and ground water.

6.3. Methods and material for containment and cleaning up

Recommendations:
Absorb spillages with sand or inert absorbent and transfer to a safe place. It is not absorbed in sawdust or other combustible absorbents. See also section 13 for any consult regarding disposing.

6.4. Reference to other sections

See also sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

A.- General precautions

Comply with current legislation on occupational risk prevention in terms of manual handling of loads and chemical products. Keep containers hermetically sealed. Avoid free spillage from the container. Maintain order, cleanliness and disposal by safe methods (section 6).

B.- Technical recommendations for fire and explosion prevention

Non-flammable product under normal conditions of storage, handling and use. Transfer at slow speeds is recommended to avoid generation of electrostatic charges that may affect flammable products. See section 10 for conditions and materials to avoid.

C.- Technical recommendations for ergonomic and toxicological risk prevention

For exposure control, see section 8. Do not eat, drink or smoke in work areas; wash hands after each use and remove contaminated clothing and protective equipment before entering eating areas.

D.- Technical recommendations for environmental risk prevention

It is recommended to have material for containment and cleanup around the product (see section 6.3).

7.2. Conditions for safe storage, including any incompatibilities

A.- Technical storing measures

Minimum temperature:	5 ºC
Maximum temperature:	40 ºC
Maximum time:	36 months

B.- General storing conditions

The product is hygroscopic, keep in tightly closed original containers, in case of transfer make sure that the material of the container is compatible with the product, recommended materials: HDPE, PP, INOX 304, INOX 316.

Do not store in galvanised containers or containers containing zinc as propylene glycol is not compatible and may dissolve the product.

Avoid direct sunlight, heat sources, radiations, static electricity and contact with food. See section 10.4 and 10.5 for more information.

7.3. Specific final uses

Except for the specified instructions, there is no other necessary 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 controlled in the working environment:

DNEL (Workers)

Name		Short Exposure		Chronic effects	
		Systemic	Local	Systemic	Local
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	Oral	Not applicable	Not applicable	Not applicable	Not applicable
	Skin	Not applicable	Not applicable	Not applicable	Not applicable
	Inhalation	Not applicable	Not applicable	168 mg/m^3	10 mg/m^3

DNEL (Consumers)

Name		Short Exposure		Chronic effects	
		Systemic	Local	Systemic	Local
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	Oral	Not applicable	Not applicable	85 mg/kg day	Not applicable
	Skin	Not applicable	Not applicable	213 mg/kg day	Not applicable
	Inhalation	Not applicable	Not applicable	50 mg/m^3	10 mg/m^3

PNEC

Name				
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	**Sediment (Fresh Water)**	572 mg/Kg	**Fresh Water**	260 mg/L
	Sediment (Marine Water)	57,2 mg/Kg	**Marine Water**	26 mg/L
	Soil	50 mg/Kg	**Intermittent**	183 mg/l
	Municipal Water Treatment Plant	20.000 mg/l		

8.2. Exposure controls

A.- Safety and hygiene measures in the working environment

In accordance with the priority order for occupational exposure control the localized extraction of the working area is recommended as a collective protection measure to avoid exceeding occupational exposure limits. If personal protective equipment is used, it should have the CE marking in accordance with current legislation. For more information regarding personal protective equipment (storage, use, cleaning, type of protection, etc.), see the information leaflet provided by the manufacturer. The instructions detailed in this point refer to pure product. Safety measures for diluted product may vary depending on the degree of dilution, use, application method, etc. In order to determine the obligation to install emergency showers and/or eyebath in warehouses, regulations referring to storage of chemical products should be followed. For more information, see points 7.1 and 7.2. This information is a recommendation. Risk prevention services should correct the information, it is unknown if the company has additional prevention measures or if they have been included in the appropriate risk evaluation.

B.- Respiratory protection

In case of high vapour concentrations or if occupational exposure limits are exceeded (see section 8.1), wear a respiratory protective mask with filter for organic vapours (EN 136/140/141/145/143/149). Under normal conditions, respiratory protection is not required.

C.- Specific hand protection

Image	Personal Protection Equipment	Marking	CEN Standards	Notes
 Mandatory hand protection	Protective gloves against minor hazards	CE CAT I		Replace gloves when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III gloves is recommended according to the regulations EN ISO 21420 and EN ISO 374-1

D.- Eye/Face protection

Image	Personal Protection Equipment	Marking	CEN Standards	Notes
 Mandatory face protection	Panoramic goggles against splash and/or projections	CE CAT II	EN 166 EN ISO 4007	Clean daily and sanitize periodically according the instructions of the manufacturer. Recommended in case of splashing risk.

E.- Body protection

Image	Personal Protection Equipment	Marking	CEN Standards	Notes
	Work clothes	CE CAT I	EN ISO 13034	Replace when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III is recommended according to the regulations EN ISO 6529, EN ISO 6530, EN ISO 13688, EN 464
	Non slip footwear	CE CAT II	EN ISO 20347	Replace when there are signs of deterioration. For long exposure to the product by professional/industrial users, the use of CE III is recommended according to the regulations EN ISO 20345y EN 13832-1

F. – Complementary emergency measures

Emergency Measure	Regulations	Emergency Measure	Regulations
 Emergency shower	ANSI Z358-1 ISO 3864-1 ISO 3864-4	 Eyebath	DIN 12 899 ISO 3864-1 ISO 3864-4

Environmental exposure controls:
In accordance with the European legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see section 7.1.D.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

See the product's technical datasheet/specifications sheet for more information.

Physical state at 20 ºC:	Liquid
Appearance:	Transparent fluid
Color:	Blue
Odor:	Weak, characteristic
Odor Threshold:	Not relevant *
Volatility:	
Boiling point at atmospheric pressure:	Approx. 150°C
Vapor pressure at 20 ºC:	0.1 mbar at 20°C
Vapor pressure at 50 ºC:	Not relevant *
Evaporation rate at 20 ºC:	Not relevant *
Characterization of the product:	
Density at 20 ºC:	1.04-1.06 g/cc
Relative density at 20 ºC:	Not relevant *
Dynamic viscosity at 20 ºC:	Not relevant *
Cinematic viscosity at 20 ºC:	Not relevant *
Cinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	8,5-9,25
Vapor density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water at 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Unlimited
Solubility properties:	Soluble in polar solvents
Decomposition temperature:	Not relevant*
Melting/freezing point:	<-50°C
Flammability:	
Flash point:	>100°C
Flammability (solid, gas):	Not relevant *
Ignition temperature:	>200°C
Lower flammability limit:	2,6% V/V
Upper flammability limit:	12,6% V/V
Explosiveness (Solid):	
Lower explosion limit:	Not relevant *
Upper explosion limit:	Not relevant *

Characteristics of the particles:

Equivalent average diameter:	Not relevant *

*Not relevant due to the nature of the product, not providing characteristic information regarding its danger.

9.2. Other information

Information about physical hazard types:

Exploding properties:	Not relevant *
Comburent properties:	Not relevant *
Metal corrosion:	Not relevant *
Ignition heat:	Not relevant *
Aerosols-total percentage (in mass) of flammable components:	Not relevant *

Other safety characteristics:

Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *
Volatile organic compounds (VOC):	0%.

* Not relevant due to the nature of the product, not providing characteristic information regarding its danger.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

No hazardous reactions are expected if the technical storing instructions for chemical products are followed (see section 7).

10.2. Chemical stability

Stable under normal storing, handling and use conditions.

10.3. Possibility of hazardous reactions

Under the specified conditions, no hazardous reactions leading to excessive pressure or temperatures are expected.

10.4. Conditions to avoid

For handling and storing at room temperature:

Impact and Friction	Contact with Air	Heating	Sunlight
Not applicable	Not applicable	Not applicable	Avoid direct incidence

10.5. Incompatible materials

Avoid galvanized or zinc plated containers.

Acids, bases and oxidants	Water	Comburent Materials	Combustible Materials
Avoid strong acids, bases and oxidants	No aplicable	Avoid direct incidence	Not applicable

10.6. Hazardous Decomposition Product(s)

Not expected if handled according to the safety data sheet.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on the kinds of hazards defined in Regulation (EC) NO. 1272/2008

A.- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met and no substances are classified as hazardous for this effect. For further information see section 3.

- Corrosivity/Irritability: Based on available data, the classification criteria are not met and no substances classified as hazardous for this effect are present. For further information see section 3.

B.- Inhalation (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met and no substances are classified as hazardous for this effect. For further information see section 3.

- Corrosivity/Irritability: Based on available data, the classification criteria are not met and no substances classified as hazardous for this effect are present. For further information see section 3.

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

Based on the available data, the classification criteria are not met and no substances are classified as hazardous due to this effect. For further information see section 3.

D.- CMR effects (Carcinogenicity, Mutagenicity and Reproduction Toxicity):

- Carcinogenicity: Based on available data, the classification criteria are not met and no substances are classified as hazardous for this effect. For further information see section 3. IARC: Not relevant.

- Mutagenicity: Based on available data, the classification criteria are not met and no substances classified as hazardous for this effect are present. For further information see section 3.

- Reproductive toxicity: Based on available data, the classification criteria are not met and no substances are classified as hazardous for this effect. For further information see section 3.

E.- Sensitization effects:

- Respiratory: Based on available data, the classification criteria are not met and there are no substances classified as hazardous with sensitising effects above the limits listed in section 3.2 of Regulation (EC) 2020/878. For further information see sections 2, 3 and 15.

- Cutaneous: Based on available data, the classification criteria are not met and no substances are classified as hazardous due to this effect. For further information see section 3.

F.- Specific Target Organ Toxicity (STOT)-single exposure:

Based on the available data, the classification criteria are not met and no substances are classified as hazardous due to this effect. For further 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 and no substances are classified as hazardous for this effect. For further information see section 3.

- Skin: Based on available data, the classification criteria are not met and no substances classified as hazardous for this effect are present. For further information see section 3.

H.- Aspiration hazard:

Based on the available data, the classification criteria are not met and no substances are classified as hazardous due to this effect. For further information see section 3.

Substance specific toxicological information:

Name	Acute toxicity					
	Parameter	**Exposure time**	**Value**	**Method**	**Species**	
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	DL50 oral	-	22000 mg/Kg	OCDE 401	Rat	
	DL50 Skin	24 h	> 2000 mg/Kg	OCDE 402	Rabbit	
	CL50 inhalation	2 h	> 317mg/m^3	OCDE 403	Rat	
	Corrosion or irritation					
	Exposure route	**Exposure time**	**Result**	**Method**	**Species**	
	Oral	24,48,72h	Non-irritating	OCDE 405	Rabbit	
	Skin	24,48,72h	Non-irritating	OCDE 404	Rabbit	
	Skin	24 h	Slightly irritating	Patch	Man	
	Respiratory or skin sensitisation					
	Exposure route	**Exposure time**	**Result**	**Method**	**Species**	
	Skin	-	Non-sensitising	OCDE 429	Mouse	
	Skin	24 h	Non-sensitising	Patch	Man	
	Inhalation	-	Not relevant	-	-	
	Specific target organ toxicity					
	Exposure route	**Exposure time**	**Value**	**Effect**	**Method**	**Species**
	Oral	>102 weeks (daily, 5 days/week)	1700 mg/Kg day	No effect	OCDE 429	Rat
	Skin	10 weeks (daily 5 days/week)	0,02 ml (twice a week)	No effect	Patch	Mouse
	Inhalation	90 days	160 mg/m^3	No effect	LOAEC	Rat

Name	Germ cell mutagenicity					
	Result		Method		Test substrate	
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	Negative		Others		S.typhimurium bacteria	
	Negative		OCDE473		Human lymphocytes	
	Carcinogenicity					
	Exposure route	Exposure time	Value	Effect	Method	Species
	Inhalation	18 months	>350 mg/ m^3 air	No effect	NOAEC	Rat
	Skin	-	0,02 ml (twice a week)	No effect	NOAEL	Mouse
	Oral	2 years	1700 mg/Kg	No effect	NOAEL	Rat
	Oral	105 weeks	3040 mg/Kg	No effect	NOAEL	Rat
	Oral	105 weeks	2390 mg/Kg day	No effect	NOAEL	Mouse
	Reproductive toxicity					
	Test	Exposure time	Value	Effect	Method	Species
	Fertility effect	-	10100 mg/Kg día	No effect	OCDE 416	Mouse
	Developmental toxicity	9 days	10400 mg/Kg día	No effect	OCDE 414	Mouse

11.2. Information of other hazards

This product does not contain any endocrine disrupting components that have an effect on human health.

No information on other adverse health effects is available.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Substance-specific aquatic toxicity:

Acute toxicity

Name	Acute Toxicity	Concentration	Specie	Test
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	CL50 (96 h) – Fish	40.613 mg/l	Oncorhynchus mykiss	OEDC 203
	CE50 (48 h) – Aquatic invertebrates	18.340 mg/l	Ceriodaphnia dubia	OEDC 202
	CE50 (96 h) – Aquatic plants	19.000 mg/l	Pseudokirchneriella subcapitata	OEDC 201

Material not classified as harmful to aquatic organisms (LC50/EC50/IC50 greater than 1000 mg/L for most sensitive species).

Long term toxicity:

Name	Chronic toxicity	Concentration	Specie	Test
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	NOEC (7d) – Aquatic invertebrates	13.020 mg/l	Ceriodaphnia sp.	EPA 600/4-89/001)
	NOEC – Aquatic plants	15.000 mg/l	Pseudokirchneriella subcapitata	OEDC 201

12.2. Persistence and degradability

Substance specific information:

Name	Biodegradation in water			
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	**Method**	**Value**	**Testi time**	**Value**
	OCDE 301F	81, 7%	28 days	Experimental
	Biodegradation in soil			
	Method	**Value**	**Testi time**	**Value**
	OCDE 306	96%	64 days	Experimental
	Phototransformation air (DT50 air)			
	Method	**Value**	**OH Con. Radicals**	**Value**
	AOPWIN v1.92	0,83 days	$1.5x10^6$ /cm^3	QSAR
	Phototransformation water (DT50 water)			
	Method	**Value**	**OH Con. Radicals**	**Value**
	Others	2,3 years	$1.5x10^6$ /cm^3	Calculated

Based on the individual components the material is readily biodegradable in water. Biodegradable in soil under anaerobic conditions. Photodegradation in water occurs slowly.

12.3. Bioaccumulative potential

Substance specific information:

Name		Value	Method
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	Bioconcentration factor (BCF)	0,09	Estimated
	Partition coefficient n-octanol/water (Log POW)	-1,07 (20,5°C)	Test method EU A.8
	Bioaccumulation potential	Non bioaccumulative	

It is estimated to have a bioaccumulation potential <0,09, so it has no accumulation problems in living organisms. It is completely soluble in water and given its octanol/water partition coefficient (POW), it is expected to have high mobility in soils. Bioconcentration and uptake in sediments is not significant.

12.4. Mobility in soil

Substance specific information:

Name	Volatility (Henry's Law H Constant)					
Propane-1,2-diol CAS: 57-55-6 CE: 200-338-0	**Method**	**Value**	**Temperature**	**Value Determination**		
	Cálculo EUSES	0,00566 atm m^3/mol	12 ºC	Estimated value		
	Percentage distribution					
	Method	**Fraction air**	**Fraction sediment**	**Fraction Soil**	**Fraction Water**	**Value Determination**
	Mackay Level III	2,98%	0,07%	48,1%	48,8%	Calculated value

Volatile organic compounds (VOC): 0%.
Surface tension (21,5ºC)= 0,0716 N/m
Normalised organic carbon adsorption coefficient (Log Koc) = 0.46 (calculated value)
Low volatile. Soluble in water. Low adsorption potential in soil.

12.5. Results of PBT and vPvB assessment

For Propylene Glycol: According to Annex XIII of Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH): The product does not meet the classification criteria for PBT (persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative) substances.

12.6. Endocrine alteration properties

For Propylene Glycol: The substance has not been identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 and is not included in the Candidate List of Substances of Very High Concern according to Article 59 of EU REACH as having endocrine disrupting properties.

12.7. Other adverse effects

Not concerned by Regulation (EU) nº 2024/590 of the European Parliament and of the Council of 7 February 2024 on substances that deplete the ozone layer.

No information on other adverse effects on the environment is available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Code	Description	Type of Waste (Regulation (EU) NO. 1357/2014)
	It is not possible to assign a specific code, as it depends on the user's intended use.	Non-Hazardous

Type of waste (Regulation (EU) NO. 1357/2014):

Not relevant.

Waste management (disposal and assessment):

Consult the authorised waste manager for recovery and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). According to codes 15 01 (2014/955/EU), if the packaging has been in direct contact with the product, it will be managed in the same way as the product itself, otherwise it will be managed as non-hazardous waste. Discharge into watercourses is not recommended. See section 6.2.

Legal provisions on waste management:

According to Annex II of Regulation (EC) No 1907/2006 (REACH), Community or State provisions related to waste management are listed: Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014.

SECTION 14. TRANSPORT INFORMATION

Not classified as a dangerosu good under transport regulations.

	ADR/RID	ADN	IMDG	IATA/ICAO
14.1. UN or ID number	-	-	-	-
14.2. UN Proper Shipping Name	-	-	-	-
14.3. Transport hazard class(es)	-	-	-	-
14.4. Packing Group	-	-	-	-
14.5. Environmental hazards	-	-	-	-

14.6. Special precautions for users

See sections 6, 7 and 8.

14.7. Maritime transport in bulk according to the IMO instruments

Not applicable.

SECTION 15. REGULATORY INFORMATION

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

- Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII of the REACH Regulation): Not relevant.
- List of substances subject to authorisation (Annex XIV of REACH Regulation): Not relevant.

- Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals: Not relevant.

- Regulation (EU) No 2019/1021 on persistent organic pollutants: Not relevant.

- Active substances which have been included in Article 95 of Regulation (EU) No. 528/2012: Not relevant.

- Regulation (EU) nº 2024/590 on substances that deplete the ozone layer: Not relevant.

Seveso III:

Not relevant

Particular provisions on human and environmental protection:

It is recommended to use the information collected in this safety data sheet as input data for a risk assessment of the local circumstances in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislations:

Regulation EC No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.

Regulation EC No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006 and subsequent amendments.

15.2. Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Legislation applicable to Safety Data Sheets:

This Safety Data Sheet has been developed according to ANNEX II-Guide to the compilation of Safety Data Sheets of Regulation (EC) NO. 1907/2006 (REGULATION (EU) 2020/878 OF THE COMMISSION).

Modifications regarding the previous Safety Data Sheet affecting risk management measures:

Not relevant.

GHS hazard statements included in section 2:

Not relevant.

GHS hazard statements included in section 3:

Not relevant.

Regulation NO. 1272/2008 (CLP):

Not relevant.

Advice regarding training:

Minimum training in occupational risk prevention is recommended for personnel who will handle this product, in order to facilitate the understanding and interpretation of this safety data sheet, as well as the labelling of the product.

Main bibliography:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

SDS: Safety Data Sheet

CAS: Chemical Abstracts Service - Division of rhe American CHemical Society

EUSES: European Union System for the Evaluation of Chemical Substances

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective Concentration 50

VOC: Volatile Organic Compounds

DNEL: No-Effect Level: level of exposure to the substance below which no adverse effects are expected and above which humans should not be exposed.

vPvB: Very Persistent/Very Bioaccumulative

PBT: Persistent/bioaccumulative/toxic

STOT: Specific Target Organ Toxicity

STP: Municipal Water Treatment Plant

LOAEC: Lowest Observable Adverse Effect Concentration

NOAEC: No Observed Adverse Effect Concentration NOAEL: No Observable Adverse Effect Level

NOAEL: No Observed Adverse Effect Level. Highest dose at which no adverse effect is observed.

NOEC: No Observed Effect Concentration

BCF: Bioconcentration Factor

IARC: International Agency for Research on Cancer

PNEC: Predicted No Effect Concentration: concentration of the substance for which no adverse effects on environmental performance are expected.

QSAR: Quantitative Structure-Activity Relationship

REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances

ADR: European Agreement concerning the International Carriage of Goods by Road

RID: European Agreement concerning the International Carriage of Dangerous Goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation