

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

1.1 Product identifier:

20 MINUTE EPOXY ADHESIVE (B)

Other means of identification:

Not relevant

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

Relevant uses (Consumer use): Catalyst

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:

DUROSTICK SA PATIMA KOROREMI 193 00 ASPROPIRGOS, ATTICA - GREECE Phone: +30 211 60 03 500-599 - Fax: +30 210 55 99 612 koutsibelis@durostick.gr www.durostick.gr

1.4 Emergency telephone number: +30 210 77 93 777

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.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302 Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410 Eye Irrit. 2: Eye irritation, Category 2, H319 Skin Irrit. 2: Skin irritation, Category 2, H315 Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning



Hazard statements:

Acute Tox. 4: H302 - Harmful if swallowed. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. Eye Irrit. 2: H319 - Causes serious eye irritation. Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Precautionary statements:

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

P102: Keep out of reach of children.

P261: Avoid breathing vapours

P264: Wash thoroughly after handling.

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

P302+P352: IF ON SKIN: Wash with plenty of water.

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

P501: Dispose of contents/container according to the separated collection system used in your municipality.

Supplementary information:

EUH205: Contains epoxy constituents. May produce an allergic reaction.

Substances that contribute to the classification

Pentaerythritol tetrakis(3-mercaptopropionate); benzyl alcohol

Acute Toxicity Estimate (ATE mix):



SECTION 2: HAZARDS IDENTIFICATION (continued)

50 % (oral) of the mixture consists of ingredient(s) of unknown toxicity

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:

Not relevant

3.2 Mixture:

Chemical description: Mixture

Components:

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

	Identification	Chemical name/Classification			
CAS: 7575-23-7 EC: 231-472-8		Pentaerythritol tetrakis(3-mercaptopropionate) ⁽¹⁾ Self-classified			
Index:	Not relevant 01-2119486981-23- XXXX	Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute H317 - Warning	2 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1A:	25 - <50 %	
		reaction product: bisphenol-A-(epichlorhydrin), epweight \leq 700) ⁽¹⁾	boxy resin (number average molecular ATP CLP00		
Index: REACH:	603-074-00-8 Not relevant	Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Irrit Warning	2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 -	10 - <25 %	
CAS:	100-51-6	benzyl alcohol ⁽¹⁾	ATP ATP21		
EC: Index: REACH:	202-859-9 603-057-00-5 01-2119492630-38- XXXX	Regulation 1272/2008 Acute Tox. 4: H302; Eye Irrit. 2: H	1319; Skin Sens. 1B: H317 - Warning	2,5 - <10 %	

(1) 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.

Other information:

Identification			M-factor	
Pentaerythritol tetrakis(3-mercaptopropionate)		Acute	10	
CAS: 7575-23-7 EC: 231-472-8		Chronic	10	
Identification	Spec	ific concentration	on limit	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight ≤ 700) CAS: 25068-38-6 EC: 500-033-5	% (w/w) >=5: Skin Irrit. 2 - % (w/w) >=5: Eye Irrit. 2 - H			

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 toxicit	ý	Genus
Pentaerythritol tetrakis(3-mercaptopropionate)	LD50 oral	1000 mg/kg	Rat
CAS: 7575-23-7	LD50 dermal	Not relevant	
EC: 231-472-8	LC50 inhalation vapour	Not relevant	
benzyl alcohol	LD50 oral	1200 mg/kg	
CAS: 100-51-6	LD50 dermal	Not relevant	
EC: 202-859-9	LC50 inhalation vapour	Not relevant	

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:**



SECTION 4: FIRST AID MEASURES (continued)

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 eves thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eves. 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 guickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

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

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

Not relevant

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. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

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. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

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

6.2 **Environmental precautions:**



SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

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:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

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 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

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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

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.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.:5 °CMaximum Temp.:30 °CMaximum time:18 Months

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):

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

DNEL (Workers):



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short	exposure	Long	exposure
Identification		Systemic	Local	Systemic	Local
Pentaerythritol tetrakis(3-mercaptopropionate)	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 7575-23-7	Dermal	Not relevant	Not relevant	5 mg/kg	Not relevant
EC: 231-472-8	Inhalation	Not relevant	40,13 mg/m ³	1,74 mg/m ³	40,13 mg/m ³
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 25068-38-6	Dermal	Not relevant	Not relevant	0,75 mg/kg	Not relevant
EC: 500-033-5	Inhalation	Not relevant	Not relevant	4,93 mg/m ³	Not relevant
benzyl alcohol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 100-51-6	Dermal	40 mg/kg	Not relevant	8 mg/kg	Not relevant
EC: 202-859-9	Inhalation	110 mg/m ³	Not relevant	22 mg/m ³	Not relevant

DNEL (General population):

		Short e	exposure	Long	exposure
Identification	Systemic	Local	Systemic	Local	
Pentaerythritol tetrakis(3-mercaptopropionate)	Oral	Not relevant	Not relevant	0,25 mg/kg	Not relevant
CAS: 7575-23-7	Dermal	Not relevant	Not relevant	2,5 mg/kg	Not relevant
EC: 231-472-8	Inhalation	Not relevant	20,07 mg/m ³	0,43 mg/m ³	20,07 mg/m ³
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	Oral	Not relevant	Not relevant	0,5 mg/kg	Not relevant
CAS: 25068-38-6	Dermal	Not relevant	Not relevant	0,0893 mg/kg	Not relevant
EC: 500-033-5	Inhalation	Not relevant	Not relevant	0,87 mg/m ³	Not relevant
benzyl alcohol	Oral	20 mg/kg	Not relevant	4 mg/kg	Not relevant
CAS: 100-51-6	Dermal	20 mg/kg	Not relevant	4 mg/kg	Not relevant
EC: 202-859-9	Inhalation	27 mg/m ³	Not relevant	5,4 mg/m ³	Not relevant

PNEC:

Identification				
Pentaerythritol tetrakis(3-mercaptopropionate)	STP	2,39 mg/L	Fresh water	0,00003 mg/L
CAS: 7575-23-7	Soil	0,000184 mg/kg	Marine water	0,0000034 mg/L
EC: 231-472-8	Intermittent	0,00034 mg/L	Sediment (Fresh water)	0,00102 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,000102 mg/kg
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	STP	10 mg/L	Fresh water	0,006 mg/L
CAS: 25068-38-6	Soil	0,065 mg/kg	Marine water	0,001 mg/L
EC: 500-033-5	Intermittent	0,018 mg/L	Sediment (Fresh water)	0,341 mg/kg
	Oral	0,011 g/kg	Sediment (Marine water)	0,034 mg/kg
benzyl alcohol	STP	39 mg/L	Fresh water	1 mg/L
CAS: 100-51-6	Soil	0,456 mg/kg	Marine water	0,1 mg/L
EC: 202-859-9	Intermittent	2,3 mg/L	Sediment (Fresh water)	5,27 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,527 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A)		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Protective gloves against minor risks	CATI		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018

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.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CATI		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CAT II	EN ISO 20347:2022	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

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

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Appearance:

Physical state at 20 °C: Liquid Thixotropic

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



SECT	TON 9: PHYSICAL AND CHEMICAL PROPERTIES	(continued)
	Colour:	White
	Odour:	Not relevant *
	Odour threshold:	Not relevant *
	Volatility:	
	Boiling point at atmospheric pressure:	205 °C
	Vapour pressure at 20 °C:	7 Pa
	Vapour pressure at 50 °C:	85,83 Pa (0,09 kPa)
	Evaporation rate at 20 °C:	Not relevant *
	Product description:	
	Density at 20 °C:	1170,3 kg/m³
	Relative density at 20 °C:	1,17
	Dynamic viscosity at 20 °C:	Not relevant *
	Kinematic viscosity at 20 °C:	Not relevant *
	Kinematic viscosity at 40 °C:	Not relevant *
	Concentration:	Not relevant *
	pH:	Not relevant *
	Vapour density at 20 °C:	Not relevant *
	Partition coefficient n-octanol/water 20 °C:	Not relevant *
	Solubility in water at 20 °C:	Not relevant *
	Solubility properties:	Not relevant *
	Decomposition temperature:	Not relevant *
	Melting point/freezing point:	Not relevant *
	Flammability:	
	Flash Point:	Non Flammable (>60 °C)
	Flammability (solid, gas):	Not relevant *
	Autoignition temperature:	436 °C
	Lower flammability limit:	Not relevant *
	Upper flammability limit:	Not relevant *
	Particle characteristics:	
	Median equivalent diameter:	Not relevant *
9.2	Other information:	
	Information with regard to physical hazard classe	
	Explosive properties:	Not relevant *
	Oxidising properties:	Not relevant *
	Corrosive to metals:	Not relevant *
	Heat of combustion:	Not relevant *
	Aerosols-total percentage (by mass) of flammable components:	Not relevant *
	Other safety characteristics:	
	Surface tension at 20 °C:	Not relevant *
	Refraction index:	Not relevant *
	*Not relevant due to the nature of the product, not providing informa-	ation property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:



SECTION 10: STABILITY AND REACTIVITY (continued)

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:

Contains substances which require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated.

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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
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, 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: 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.
 - 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: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- F- Specific target organ toxicity (STOT) single exposure:



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxici	Acute toxicity		
Pentaerythritol tetrakis(3-mercaptopropionate)	LD50 oral	1000 mg/kg	Rat	
CAS: 7575-23-7	LD50 dermal			
EC: 231-472-8	LC50 inhalation			
benzyl alcohol	LD50 oral	1200 mg/kg		
CAS: 100-51-6	LD50 dermal			
EC: 202-859-9	LC50 inhalation			

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	1016,95 mg/kg (Calculation method)	50 %
Dermal	>2000 mg/kg (Calculation method)	0 %
LC50 inhalation vapour	>20 mg/L (4 h) (Calculation method)	0 %

11.2 Information on other hazards:

Endocrine disrupting properties

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

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

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

Very toxic to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification		Concentration	Species	Genus
Pentaerythritol tetrakis(3-mercaptopropionate)	LC50	0,034 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 7575-23-7	EC50	0,35 mg/L (48 h)	Daphnia magna	Crustacean
EC: 231-472-8	EC50	0,12 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 25068-38-6	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 500-033-5	EC50	>1 - 10 mg/L (72 h)		Algae
benzyl alcohol	LC50	646 mg/L (48 h)	Leuciscus idus	Fish
CAS: 100-51-6	EC50	400 mg/L (24 h)	Daphnia magna	Crustacean
EC: 202-859-9	EC50	79 mg/L (3 h)	Scenedesmus subspicatus	Algae



SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Concentration	Species	Genus
Pentaerythritol tetrakis(3-mercaptopropionate)	NOEC	>0.01 - 0.1 mg/L		Fish
CAS: 7575-23-7 EC: 231-472-8	NOEC	>0.01 - 0.1 mg/L		Crustacean
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	NOEC	Not relevant		
CAS: 25068-38-6 EC: 500-033-5	NOEC	0,3 mg/L	Daphnia magna	Crustacean
benzyl alcohol	NOEC	48,897 mg/L	N/A	Fish
CAS: 100-51-6 EC: 202-859-9	NOEC	51 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degra	dability	Biodegradability	
Pentaerythritol tetrakis(3-mercaptopropionate)	BOD5	Not relevant	Concentration	10 mg/L
CAS: 7575-23-7	COD	Not relevant	Period	28 days
EC: 231-472-8	BOD5/COD	Not relevant	% Biodegradable	26 %
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	BOD5	Not relevant	Concentration	100 mg/L
CAS: 25068-38-6	COD	Not relevant	Period	28 days
EC: 500-033-5	BOD5/COD	Not relevant	% Biodegradable	0 %
benzyl alcohol	BOD5	Not relevant	Concentration	100 mg/L
CAS: 100-51-6	COD	Not relevant	Period	14 days
EC: 202-859-9	BOD5/COD	Not relevant	% Biodegradable	94 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential		
Pentaerythritol tetrakis(3-mercaptopropionate)	BCF	24	
CAS: 7575-23-7	Pow Log	3.03	
EC: 231-472-8	Potential	Low	
reaction product: bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight \leq 700)	BCF	4	
CAS: 25068-38-6	Pow Log	2.8	
EC: 500-033-5	Potential	Low	
benzyl alcohol	BCF	0.3	
CAS: 100-51-6	Pow Log	1.1	
EC: 202-859-9	Potential	Low	

12.4 Mobility in soil:

Identification	Absorp	Absorption/desorption		Volatility	
Pentaerythritol tetrakis(3-mercaptopropionate)	Кос	264	Henry	Not relevant	
CAS: 7575-23-7	Conclusion	Moderate	Dry soil	Not relevant	
EC: 231-472-8	Surface tension	Not relevant	Moist soil	Not relevant	
benzyl alcohol	Кос	Not relevant	Henry	Not relevant	
CAS: 100-51-6	Conclusion	Not relevant	Dry soil	Not relevant	
EC: 202-859-9	Surface tension	3,679E-2 N/m (25 °C)	Moist soil	Not relevant	

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:



SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	Hazardous

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

HP14 Ecotoxic, HP6 Acute Toxicity, HP13 Sensitising, HP4 Irritant - skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous 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:

		UN number or ID number: UN proper shipping name:	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pentaerythritol tetrakis(3-mercaptopropionate))
9	14.3	Transport hazard class(es): Labels:	9 9
	144	Packing group:	III
		Environmental hazards:	Yes
	-	Special precautions for user	
		Special regulations:	274, 335, 375, 601
		Tunnel restriction code:	-
		Physico-Chemical properties:	see section 9
		Limited quantities:	5 L
	14.7	Maritime transport in bulk according to IMO instruments:	Not relevant
Transport of dar	ngerou	s goods by sea:	
With regard to IMI	DG 41-2	22:	
	14.1	UN number or ID number:	UN3082
	14.2	UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pentaerythritol tetrakis(3-mercaptopropionate))
	14.3	Transport hazard class(es):	9
\vee \vee		Labels:	9
		Packing group:	III
		Marine pollutant:	Yes
	14.6	Special precautions for user	225 060 274
		Special regulations:	335, 969, 274
		EmS Codes: Physico-Chemical properties:	F-A, S-F see section 9
		Limited quantities:	5 L
		Segregation group:	Not relevant
	14.7	Maritime transport in bulk according to IMO instruments:	Not relevant
Transport of dar	ngerou	s goods by air:	
With regard to IAT	TA/ICAC	D 2024:	

Version: 4 (Replaced 3)



SECTION 14: TRANSPORT INFORMATION (continued) UN3082 14.1 UN number or ID number: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 14.2 UN proper shipping name: (Pentaerythritol tetrakis(3-mercaptopropionate)) 14.3 Transport hazard class(es): 9 9 Labels: 14.4 Packing group: III 14.5 Environmental hazards: Yec 14.6 Special precautions for user Physico-Chemical properties: see section 9 14.7 Maritime transport in bulk Not relevant according to IMO instruments:

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: benzyl alcohol (100-51-6) PT: (6)
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU)No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
E1	ENVIRONMENTAL HAZARDS	100	200

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.:

Not relevant

Texts of the legislative phrases mentioned in section 2:

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

- H317: May cause an allergic skin reaction.
- H315: Causes skin irritation.

H302: Harmful if swallowed.

H319: Causes serious eye irritation.



SECTION 16: OTHER INFORMATION (continued)

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:

Acute Tox. 4: H302 - Harmful if swallowed. Aquatic Acute 1: H400 - Very toxic to aquatic life. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. Eye Irrit. 2: H319 - Causes serious eye irritation. Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Skin Sens. 1A: H317 - May cause an allergic skin reaction. Skin Sens. 1B: H317 - May cause an allergic skin reaction.

Classification procedure:

Aquatic Acute 1: Calculation method Aquatic Chronic 1: Calculation method Skin Sens. 1A: Calculation method Skin Irrit. 2: Calculation method Acute Tox. 4: Calculation method Eye Irrit. 2: Calculation method

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.

- END OF SAFETY DATA SHEET -