HARDENER EPOXY PRIMERS ANTIOSMOTIC HS 2:3

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

1.1 Product identifier: HARDENER EPOXY PRIMERS ANTIOSMOTIC HS 2:3

Other means of identification:

UFI: X4M1-K3KW-U00A-WHCQ

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

Relevant uses: Products for ships, boats, ... (construction, repair, ...); hardener for coatings

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:

Troton Sp. z o.o.
Ząbrowo 14A
78-120 Gościno - Zachodniopomorskie - Polska
Phone: +48 94 35 123 94 - Fax: +48 94 35 126 22
troton@troton.com.pl
www.troton.pl / www.troton.eu

1.4 Emergency telephone number: (8am-4pm)+48 094 35 123 94; 112

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 Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Eye Dam. 1: Serious eye damage, Category 1, H318
Repr. 2: Reproductive toxicity, Category 2, H361
Skin Corr. 1B: Skin corrosion, Category 1B, H314
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
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.
P264: Wash thoroughly after handling.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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:

EUH071: Corrosive to the respiratory tract.
EUH208: Contains 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine. May produce an allergic reaction.

Substances that contribute to the classification

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine; benzyl alcohol; m-phenylenebis(methylamine); 3-aminopropyldimethylamine

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SECTION 2: HAZARDS IDENTIFICATION (continued)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
The product contains substances with endocrine-disrupting properties: 4-tert-butylphenol

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 68082-29-1 EC: 500-191-5 Index: Non-applicable REACH: 01-2119972320-44-XXXX	**Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine(1)**	Self-classified	**50 - <75 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Danger 	
CAS: 100-51-6 EC: 202-859-9 Index: 603-057-00-5 REACH: 01-2119492630-38-XXXX	**benzyl alcohol(1)**	Self-classified	**25 - <50 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H332; Eye Irrit. 2: H319 - Warning 	
CAS: 1477-55-0 EC: 216-032-5 Index: Non-applicable REACH: 01-2119480150-50-XXXX	**m-phenylenebis(methylamine)(1)**	Self-classified	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H332; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1B: H317; EUH071 - Danger 	
CAS: 98-54-4 EC: 202-679-0 Index: 604-090-00-8 REACH: 01-2119489419-21-XXXX	**4-tert-butylphenol(1)**	Self-classified	**5 - <10 %**
	Regulation 1272/2008	Aquatic Chronic 1: H410; Eye Dam. 1: H318; Repr. 2: H361; Skin Irrit. 2: H315 - Danger 	
CAS: 109-55-7 EC: 203-680-9 Index: Non-applicable REACH: 01-2119486842-27-XXXX	**3-aminopropyldimethylamine(1)**	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Flam. Liq. 3: H226; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger 	
CAS: 90-72-2 EC: 202-013-9 Index: 603-069-00-0 REACH: 01-2119560597-27-XXXX	**2,4,6-tris(dimethylaminomethyl)phenol(1)**	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning 	
CAS: 25513-64-8 EC: 247-063-2 Index: Non-applicable REACH: 01-2119560598-25-XXXX	**2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine(1)**	Self-classified	**1 - <2,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Chronic 3: H412; Skin Corr. 1C: H314; Skin Sens. 1: H317 - Danger 	

(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.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

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

By skin contact:

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SECTION 4: FIRST AID MEASURES (continued)

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:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. 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.

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:

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

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. Destroy 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:

See section 8.

6.2 Environmental precautions:

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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:

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.- Precautions for safe manipulation

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. 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.- Technical measures for storage

Minimum Temp.: 10 ºC

Maximum Temp.: 25 ºC

Maximum time: 24 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 occupational exposure limits for the substances contained in the product

DNEL (Workers):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 68082-29-1	Dermal	Non-applicable	Non-applicable	1,1 mg/kg	Non-applicable
EC: 500-191-5	Inhalation	Non-applicable	Non-applicable	3,9 mg/m³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
benzyl alcohol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-51-6	Dermal	40 mg/kg	Non-applicable	8 mg/kg	Non-applicable
EC: 202-859-9	Inhalation	110 mg/m³	Non-applicable	22 mg/m³	Non-applicable
m-phenylenebis(methylamine)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1477-55-0	Dermal	Non-applicable	Non-applicable	0,33 mg/kg	Non-applicable
EC: 216-032-5	Inhalation	Non-applicable	Non-applicable	1,2 mg/m³	0,2 mg/m³
4-tert-butylphenol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 98-54-4	Dermal	Non-applicable	Non-applicable	0,071 mg/kg	Non-applicable
EC: 202-679-0	Inhalation	Non-applicable	Non-applicable	0,5 mg/m³	Non-applicable
3-aminopropyldimethylamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 109-55-7	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 203-680-9	Inhalation	Non-applicable	Non-applicable	1,2 mg/m³	Non-applicable
2,4,6-tris(dimethylaminomethyl)phenol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 90-72-2	Dermal	Non-applicable	Non-applicable	0,15 mg/kg	Non-applicable
EC: 202-013-9	Inhalation	Non-applicable	Non-applicable	0,53 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Oral	Non-applicable	Non-applicable	0,56 mg/kg	Non-applicable
CAS: 68082-29-1	Dermal	Non-applicable	Non-applicable	0,56 mg/kg	Non-applicable
EC: 500-191-5	Inhalation	Non-applicable	Non-applicable	0,97 mg/m³	Non-applicable
benzyl alcohol	Oral	20 mg/kg	Non-applicable	4 mg/kg	Non-applicable
CAS: 100-51-6	Dermal	20 mg/kg	Non-applicable	4 mg/kg	Non-applicable
EC: 202-859-9	Inhalation	27 mg/m³	Non-applicable	5,4 mg/m³	Non-applicable
4-tert-butylphenol	Oral	Non-applicable	Non-applicable	0,026 mg/kg	Non-applicable
CAS: 98-54-4	Dermal	Non-applicable	Non-applicable	0,026 mg/kg	Non-applicable
EC: 202-679-0	Inhalation	Non-applicable	Non-applicable	0,09 mg/m³	Non-applicable
2,4,6-tris(dimethylaminomethyl)phenol	Oral	Non-applicable	Non-applicable	0,075 mg/kg	Non-applicable
CAS: 90-72-2	Dermal	Non-applicable	Non-applicable	0,075 mg/kg	Non-applicable
EC: 202-013-9	Inhalation	Non-applicable	Non-applicable	0,13 mg/m³	Non-applicable
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	Oral	Non-applicable	Non-applicable	0,05 mg/kg	Non-applicable
CAS: 25513-64-8	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 247-063-2	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable

PNEC:

Identification				
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	STP	3,84 mg/L	Fresh water	0,004 mg/L
CAS: 68082-29-1	Soil	86,78 mg/kg	Marine water	0 mg/L
EC: 500-191-5	Intermittent	0,043 mg/L	Sediment (Fresh water)	434,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	43,4 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	Non-applicable	Sediment (Marine water)	0,527 mg/kg
m-phenylenebis(methylamine)	STP	10 mg/L	Fresh water	0,094 mg/L
CAS: 1477-55-0	Soil	2,44 mg/kg	Marine water	0,009 mg/L
EC: 216-032-5	Intermittent	0,152 mg/L	Sediment (Fresh water)	12,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,24 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
4-tert-butylphenol	STP	1,5 mg/L	Fresh water	0,01 mg/L
CAS: 98-54-4	Soil	0,25 mg/kg	Marine water	0,001 mg/L
EC: 202-679-0	Intermittent	0,048 mg/L	Sediment (Fresh water)	0,27 mg/kg
	Oral	0,04667 g/kg	Sediment (Marine water)	0,027 mg/kg
3-aminopropyldimethylamine	STP	10 mg/L	Fresh water	0,073 mg/L
CAS: 109-55-7	Soil	0,104 mg/kg	Marine water	0,007 mg/L
EC: 203-680-9	Intermittent	0,34 mg/L	Sediment (Fresh water)	0,735 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,073 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	STP	0,2 mg/L	Fresh water	0,046 mg/L
CAS: 90-72-2	Soil	0,025 mg/kg	Marine water	0,005 mg/L
EC: 202-013-9	Intermittent	0,46 mg/L	Sediment (Fresh water)	0,262 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,026 mg/kg
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	STP	72 mg/L	Fresh water	0,102 mg/L
CAS: 25513-64-8	Soil	10 mg/kg	Marine water	0,01 mg/L
EC: 247-063-2	Intermittent	0,315 mg/L	Sediment (Fresh water)	0,622 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,062 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)	CE CAT III	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.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.4 mm)	CE CAT III	EN ISO 374-1:2016+A1:2018 EN 16523-1:2015+A1:2018 EN 420:2004+A1:2010	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

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.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE 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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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2013 EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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

Environmental exposure controls:

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

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 ºC:	Liquid
Appearance:	Not available
Colour:	Grey
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	200 ºC
Vapour pressure at 20 ºC:	53 Pa
Vapour pressure at 50 ºC:	417,08 Pa (0,42 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1 kg/m³
Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	800 cP
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	>150 ºC
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	365 ºC
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 classes:

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 ºC:	Non-applicable *
Refraction index:	Non-applicable *

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

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

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

10.2 Chemical stability:

Chemically stable under the 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	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Corrosive to the respiratory tract

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

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious 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 dangerous 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 dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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 dangerous 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 dangerous 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 dangerous 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 dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 oral	>2000 mg/kg	
CAS: 68082-29-1	LD50 dermal	>2000 mg/kg	
EC: 500-191-5	LC50 inhalation	>20 mg/L	
benzyl alcohol	LD50 oral	500 mg/kg	Rat
CAS: 100-51-6	LD50 dermal	2500 mg/kg	
EC: 202-859-9	LC50 inhalation	11 mg/L (ATEi)	
4-tert-butylphenol	LD50 oral	4000 mg/kg	Rat
CAS: 98-54-4	LD50 dermal	2288 mg/kg	Rabbit
EC: 202-679-0	LC50 inhalation	>5 mg/L	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
m-phenylenebis(methylamine)	LD50 oral	1090 mg/kg	Rat
CAS: 1477-55-0	LD50 dermal	>2000 mg/kg	
EC: 216-032-5	LC50 inhalation	11 mg/L (ATEi)	
3-aminopropyldimethylamine	LD50 oral	1870 mg/kg	Rat
CAS: 109-55-7	LD50 dermal	>2000 mg/kg	
EC: 203-680-9	LC50 inhalation	>20 mg/L	
2,4,6-tris(dimethylaminomethyl)phenol	LD50 oral	1200 mg/kg	Rat
CAS: 90-72-2	LD50 dermal	>2000 mg/kg	
EC: 202-013-9	LC50 inhalation	>20 mg/L	
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	LD50 oral	910 mg/kg	Rat
CAS: 25513-64-8	LD50 dermal	>2000 mg/kg	
EC: 247-063-2	LC50 inhalation	>20 mg/L	

11.2 Information on other hazards:

Endocrine disrupting properties

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

Other information

Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LC50	7 mg/L (96 h)	Danio rerio	Fish
CAS: 68082-29-1	EC50	7 mg/L (48 h)	Daphnia magna	Crustacean
EC: 500-191-5	EC50	4 mg/L (72 h)	Pseudokirchneriella subcapitata	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
m-phenylenebis(methylamine)	LC50	88 mg/L (96 h)	Oryzias latipes	Fish
CAS: 1477-55-0	EC50	15 mg/L (48 h)	Daphnia magna	Crustacean
EC: 216-032-5	EC50	20 mg/L (72 h)	Selenastrum capricornutum	Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Concentration	Species	Genus
4-tert-butylphenol	LC50	5,14 mg/L (96 h)	Pimephales promelas	Fish
CAS: 98-54-4	EC50	4,8 mg/L (24 h)	Daphnia magna	Crustacean
EC: 202-679-0	EC50	11,2 mg/L (72 h)	Scenedesmus subspicatus	Algae
3-aminopropyldimethylamine	LC50	122 mg/L (96 h)	Leuciscus idus	Fish
CAS: 109-55-7	EC50	68,3 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-680-9	EC50	56,2 mg/L (72 h)	Scenedesmus subspicatus	Algae
2,4,6-tris(dimethylaminomethyl)phenol	LC50	345 mg/L (96 h)	QSAR	Fish
CAS: 90-72-2	EC50	Non-applicable		
EC: 202-013-9	EC50	Non-applicable		
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	LC50	Non-applicable		
CAS: 25513-64-8	EC50	Non-applicable		
EC: 247-063-2	EC50	29,5 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification		Concentration	Species	Genus
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
m-phenylenebis(methylamine)	NOEC	Non-applicable		
CAS: 1477-55-0 EC: 216-032-5	NOEC	4,7 mg/L	Daphnia magna	Crustacean
4-tert-butylphenol	NOEC	0,01 mg/L	Pimephales promelas	Fish
CAS: 98-54-4 EC: 202-679-0	NOEC	0,73 mg/L	Daphnia magna	Crustacean
3-aminopropyldimethylamine	NOEC	Non-applicable		
CAS: 109-55-7 EC: 203-680-9	NOEC	3,64 mg/L	Daphnia magna	Crustacean
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	NOEC	10,9 mg/L	Danio rerio	Fish
CAS: 25513-64-8 EC: 247-063-2	NOEC	1,02 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
benzyl alcohol	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-51-6	COD	Non-applicable	Period	14 days
EC: 202-859-9	BOD5/COD	Non-applicable	% Biodegradable	94 %
m-phenylenebis(methylamine)	BOD5	Non-applicable	Concentration	14 mg/L
CAS: 1477-55-0	COD	Non-applicable	Period	28 days
EC: 216-032-5	BOD5/COD	Non-applicable	% Biodegradable	49 %
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	BOD5	Non-applicable	Concentration	10 mg/L
CAS: 25513-64-8	COD	Non-applicable	Period	28 days
EC: 247-063-2	BOD5/COD	Non-applicable	% Biodegradable	7 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	BCF	77
CAS: 68082-29-1	Pow Log	
EC: 500-191-5	Potential	Moderate
benzyl alcohol	BCF	0
CAS: 100-51-6	Pow Log	1.1
EC: 202-859-9	Potential	Low
m-phenylenebis(methylamine)	BCF	3
CAS: 1477-55-0	Pow Log	0.18
EC: 216-032-5	Potential	Low
2,4,6-tris(dimethylaminomethyl)phenol	BCF	3
CAS: 90-72-2	Pow Log	0.77
EC: 202-013-9	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
benzyl alcohol	Koc	Non-applicable	Henry	Non-applicable
CAS: 100-51-6	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 202-859-9	Surface tension	3,679E-2 N/m (25 ºC)	Moist soil	Non-applicable
m-phenylenebis(methylamine)	Koc	1300	Henry	Non-applicable
CAS: 1477-55-0	Conclusion	Low	Dry soil	Non-applicable
EC: 216-032-5	Surface tension	Non-applicable	Moist soil	Non-applicable
4-tert-butylphenol	Koc	Non-applicable	Henry	Non-applicable
CAS: 98-54-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 202-679-0	Surface tension	2,306E-2 N/m (169,07 ºC)	Moist soil	Non-applicable
2,4,6-tris(dimethylaminomethyl)phenol	Koc	15130	Henry	9,312E-12 Pa·m³/mol
CAS: 90-72-2	Conclusion	Immobile	Dry soil	No
EC: 202-013-9	Surface tension	Non-applicable	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Contains 4-tert-butylphenol. 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 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11* 15 01 10*	waste paint and varnish containing organic solvents or other hazardous substances packaging containing residues of or contaminated by hazardous substances	Dangerous

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

HP14 Ecotoxic, HP6 Acute Toxicity, HP10 Toxic for reproduction, HP13 Sensitising, HP8 Corrosive

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. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

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

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

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



14.1	**UN number or ID number:**	UN1263
14.2	**UN proper shipping name:**	PAINT RELATED MATERIAL
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	163, 367, 650
	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 dangerous goods by sea:

With regard to IMDG 39-18:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1	**UN number or ID number:**	UN1263
14.2	**UN proper shipping name:**	PAINT RELATED MATERIAL
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Marine pollutant:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	163, 223, 955, 367
	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 dangerous goods by air:

With regard to IATA/ICAO 2021:



14.1	**UN number or ID number:**	UN1263
14.2	**UN proper shipping name:**	PAINT RELATED MATERIAL
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains benzyl alcohol.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): 4-tert-butylphenol

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: benzyl alcohol (Product-type 6)

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
E2	ENVIRONMENTAL HAZARDS	200	500

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.

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SECTION 15: REGULATORY INFORMATION (continued)

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.:

COMMISSION REGULATION (EU) 2020/878

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H411: Toxic to aquatic life with long lasting effects.
H317: May cause an allergic skin reaction.
H361: Suspected of damaging fertility or the unborn child.
H302: Harmful if swallowed.

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.
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.
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.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.
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:

Skin Corr. 1B: Calculation method
Eye Dam. 1: Calculation method
Aquatic Chronic 2: Calculation method
Skin Sens. 1A: Calculation method
Repr. 2: Calculation method
Acute Tox. 4: Calculation method

Advice related to training:

Minimal 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:

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SECTION 16: OTHER INFORMATION (continued)

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 -