EPOXY HARDENER UNIVERSAL NEW

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

1.1 Product identifier: EPOXY HARDENER UNIVERSAL NEW

Other means of identification:

UFI: RS60-31YA-A00F-4PKT

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

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

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.

Eye Dam. 1: Serious eye damage, Category 1, H318
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:

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.
P302+P352: IF ON SKIN: Wash with plenty of water.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

3-aminomethyl-3,5,5-trimethylcyclohexylamine; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine; Salicylic acid

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

*** Changes with regards to the previous version*

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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: 2855-13-2 EC: 220-666-8 Index: 612-067-00-9 REACH: 01-2119514687-32-XXXX	**3-aminomethyl-3,5,5-trimethylcyclohexylamine(1)** ATP ATP17		**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Corr. 1B: H314; 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		**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H332; Eye Irrit. 2: H319 - Warning 	
CAS: 38294-64-3 EC: 500-101-4 Index: Non-applicable REACH: 01-2119965165-33-XXXX	**4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine(1)** Self-classified		**5 - <10 %**
	Regulation 1272/2008	Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger 	
CAS: 69-72-7 EC: 200-712-3 Index: 607-732-00-5 REACH: 01-2119486984-17-XXXX	**Salicylic acid(1)** ATP ATP13		**1 - <2,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 2: H361d - 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.

Other information:

Identification	Specific concentration limit
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	% (w/w) >=0,001: Skin Sens. 1A - H317

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:

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.

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SECTION 4: FIRST AID MEASURES (continued)

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, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

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

5.3 Advice for firefighters:

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

Additional provisions:

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:

See section 8.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

It is recommended:

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

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

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SECTION 7: HANDLING AND STORAGE (continued)

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

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 to prevent ergonomic and toxicological risks

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

D.- Technical recommendations to prevent environmental risks

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

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 10 ºC

Maximum Temp.: 25 ºC

Maximum time: 12 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):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2855-13-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 220-666-8	Inhalation	Non-applicable	Non-applicable	Non-applicable	0,073 mg/m³
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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 38294-64-3	Dermal	Non-applicable	Non-applicable	0,14 mg/kg	Non-applicable
EC: 500-101-4	Inhalation	Non-applicable	Non-applicable	0,493 mg/m³	Non-applicable
Salicylic acid	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 69-72-7	Dermal	Non-applicable	Non-applicable	2,3 mg/kg	Non-applicable
EC: 200-712-3	Inhalation	Non-applicable	Non-applicable	5 mg/m³	5 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Non-applicable	Non-applicable	0,526 mg/kg	Non-applicable
CAS: 2855-13-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 220-666-8	Inhalation	Non-applicable	Non-applicable	Non-applicable	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	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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Non-applicable	Non-applicable	0,05 mg/kg	Non-applicable
CAS: 38294-64-3	Dermal	Non-applicable	Non-applicable	0,05 mg/kg	Non-applicable
EC: 500-101-4	Inhalation	Non-applicable	Non-applicable	0,074 mg/m³	Non-applicable
Salicylic acid	Oral	4 mg/kg	Non-applicable	1 mg/kg	Non-applicable
CAS: 69-72-7	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
EC: 200-712-3	Inhalation	Non-applicable	Non-applicable	4 mg/m³	Non-applicable

PNEC:

Identification				
3-aminomethyl-3,5,5-trimethylcyclohexylamine	STP	3,18 mg/L	Fresh water	0,06 mg/L
CAS: 2855-13-2	Soil	1,121 mg/kg	Marine water	0,006 mg/L
EC: 220-666-8	Intermittent	0,23 mg/L	Sediment (Fresh water)	5,784 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,578 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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	STP	10 mg/L	Fresh water	0,011 mg/L
CAS: 38294-64-3	Soil	864 mg/kg	Marine water	0,001 mg/L
EC: 500-101-4	Intermittent	0,111 mg/L	Sediment (Fresh water)	4320 mg/kg
	Oral	0,001 g/kg	Sediment (Marine water)	432 mg/kg
Salicylic acid	STP	162 mg/L	Fresh water	0,2 mg/L
CAS: 69-72-7	Soil	0,166 mg/kg	Marine water	0,02 mg/L
EC: 200-712-3	Intermittent	1 mg/L	Sediment (Fresh water)	1,42 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,142 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.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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 with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2013 EN ISO 20345:2011	Replace boots at any sign of deterioration.
 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:	Characteristic
Colour:	Green
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	233 ºC
Vapour pressure at 20 ºC:	3 Pa
Vapour pressure at 50 ºC:	45,58 Pa (0,05 kPa)

*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)

Evaporation rate at 20 ºC:	Non-applicable *
Product description:	
Density at 20 ºC:	1540 kg/m³
Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	6,33 cP
Kinematic viscosity at 20 ºC:	3,91 mm²/s
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 *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	380 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:

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SECTION 10: STABILITY AND REACTIVITY (continued)

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

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	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 : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: 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: Prolonged inhalation of the product is corrosive to mucous membranes and the upper 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: Talc (3)
- 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: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous 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 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:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	LD50 oral	>2000 mg/kg	
CAS: 38294-64-3	LD50 dermal	>2000 mg/kg	
EC: 500-101-4	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)	
Salicylic acid	LD50 oral	891 mg/kg	Rat
CAS: 69-72-7	LD50 dermal	>2000 mg/kg	
EC: 200-712-3	LC50 inhalation	>5 mg/L	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	LD50 oral	1030 mg/kg	Rat
CAS: 2855-13-2	LD50 dermal	>2000 mg/kg	
EC: 220-666-8	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
3-aminomethyl-3,5,5-trimethylcyclohexylamine	LC50	110 mg/L (96 h)	Leuciscus idus	Fish
CAS: 2855-13-2	EC50	388 mg/L (48 h)	N/A	Crustacean
EC: 220-666-8	EC50	Non-applicable		

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
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
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	LC50	>10 - 100 (96 h)		Fish
CAS: 38294-64-3	EC50	>10 - 100 (48 h)		Crustacean
EC: 500-101-4	EC50	>10 - 100 (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
3-aminomethyl-3,5,5-trimethylcyclohexylamine	NOEC	Non-applicable		
CAS: 2855-13-2 EC: 220-666-8	NOEC	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:

Identification	Degradability		Biodegradability	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	BOD5	Non-applicable	Concentration	7 mg/L
CAS: 2855-13-2	COD	Non-applicable	Period	28 days
EC: 220-666-8	BOD5/COD	Non-applicable	% Biodegradable	8 %
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 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
benzyl alcohol	BCF	0
CAS: 100-51-6	Pow Log	1.1
EC: 202-859-9	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Koc	928	Henry	4,46E-4 Pa·m³/mol
CAS: 2855-13-2	Conclusion	Low	Dry soil	No
EC: 220-666-8	Surface tension	Non-applicable	Moist soil	No
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

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Salicylic acid	Koc	Non-applicable	Henry	Non-applicable
CAS: 69-72-7	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 200-712-3	Surface tension	2,444E-2 N/m (207,25 ºC)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

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

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
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):

HP6 Acute Toxicity, 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:**	UN1760
14.2	**UN proper shipping name:**	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	274
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 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:**	UN1760
14.2	**UN proper shipping name:**	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	274
	EmS Codes:	F-A, S-B
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 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:**	UN1760
14.2	**UN proper shipping name:**	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

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): Non-applicable

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

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

Article 95, REGULATION (EU) No 528/2012: benzyl alcohol (Product-type 6) ; Salicylic acid (Product-type 2, 3, 4)

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

Seveso III:

Non-applicable

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

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

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

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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
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
· Hazard statements

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.

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 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.
Repr. 2: H361d - Suspected of damaging the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Classification procedure:

Skin Corr. 1B: Calculation method
Eye Dam. 1: Calculation method
Skin Sens. 1A: 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:

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

*** Changes with regards to the previous version*

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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 -