



## EPOXY HARDENER UNIVERSAL NEW

Printing: 18/01/2021 Date of compilation: 23/11/2017 Revised: 18/01/2021 Version: 4 (Replaced 3)

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

**1.1 Product identifier:** EPOXY HARDENER UNIVERSAL NEW

**Other means of identification:**

Non-applicable

**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

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**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.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

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

Skin Corr. 1B: Skin corrosion, Category 1B, H314

Skin Sens. 1: Sensitisation, skin, Category 1, H317

**2.2 Label elements:**

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

Danger



**Hazard statements:**

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

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Skin Sens. 1: 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/eye protection/face protection.

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

**UFI:** RS60-31YA-A00F-4PKT

**2.3 Other hazards:**

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -



## EPOXY HARDENER UNIVERSAL NEW

Printing: 18/01/2021

Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

## SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

Product fails to meet PBT/vPvB criteria

\*\* Changes with regards to the previous version

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substance:

Non-applicable

## 3.2 Mixture:

**Chemical description:** Mixture 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	<b>3-aminomethyl-3,5,5-trimethylcyclohexylamine</b> <sup>(1)</sup> Regulation 1272/2008	ATP CLP00 Acute Tox. 4: H302+H312; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	10 - <25 %
CAS: 100-51-6 EC: 202-859-9 Index: 603-057-00-5 REACH: 01-2119492630-38-XXXX	<b>benzyl alcohol</b> <sup>(1)</sup> Regulation 1272/2008	Self-classified Acute Tox. 4: H302+H332; Eye Irrit. 2: H319 - Warning	10 - <25 %
CAS: 38294-64-3 EC: 500-101-4 Index: Non-applicable REACH: 01-2119965165-33-XXXX	<b>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b> <sup>(1)</sup> Regulation 1272/2008	Self-classified Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	5 - <10 %
CAS: 69-72-7 EC: 200-712-3 Index: 607-732-00-5 REACH: 01-2119486984-17-XXXX	<b>Salicylic acid</b> <sup>(1)</sup> Regulation 1272/2008	ATP ATP13 Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 2: H361d - Danger	1 - <2,5 %

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

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:**

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:**



## EPOXY HARDENER UNIVERSAL NEW

Printing: 18/01/2021

Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

### SECTION 4: FIRST AID MEASURES (continued)

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, 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:**

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.

**6.2 Environmental precautions:**

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

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

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

**6.4 Reference to other sections:**

See sections 8 and 13.

### SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation



## EPOXY HARDENER UNIVERSAL NEW

Printing: 18/01/2021

Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

### 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

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 °C

Maximum Temp.: 25 °C

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
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	40 mg/kg	Non-applicable	8 mg/kg	Non-applicable
	Inhalation	110 mg/m <sup>3</sup>	Non-applicable	22 mg/m <sup>3</sup>	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	20 mg/kg	Non-applicable	4 mg/kg	Non-applicable
	Dermal	20 mg/kg	Non-applicable	4 mg/kg	Non-applicable
	Inhalation	27 mg/m <sup>3</sup>	Non-applicable	5,4 mg/m <sup>3</sup>	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Oral	4 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4 mg/m <sup>3</sup>	Non-applicable

#### PNEC:

**EPOXY HARDENER UNIVERSAL NEW**

Printing: 18/01/2021

Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification				
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	STP	39 mg/L	Fresh water	1 mg/L
	Soil	0,456 mg/kg	Marine water	0,1 mg/L
	Intermittent	2,3 mg/L	Sediment (Fresh water)	5,27 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,527 mg/kg
Salicylic acid CAS: 69-72-7 EC: 200-712-3	STP	162 mg/L	Fresh water	0,2 mg/L
	Soil	0,166 mg/kg	Marine water	0,02 mg/L
	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.- General security and hygiene measures in the work place**

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.

**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)		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.		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 foot protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2013 EN ISO 20345:2011	Replace boots at any sign of deterioration.
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		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.

**EPOXY HARDENER UNIVERSAL NEW**

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Revised: 18/01/2021

Version: 4 (Replaced 3)

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		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

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Characteristic
Colour:	 Green
Odour:	Characteristic
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	233 °C
Vapour pressure at 20 °C:	3 Pa
Vapour pressure at 50 °C:	45,58 Pa (0,05 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	1540 kg/m <sup>3</sup>
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	6,33 cP
Kinematic viscosity at 20 °C:	3,91 cSt
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *

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

- CONTINUED ON NEXT PAGE -

**EPOXY HARDENER UNIVERSAL NEW**

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Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Solubility in water at 20 °C:

Solubility properties: Non-applicable \*

Decomposition temperature: Non-applicable \*

Melting point/freezing point: Non-applicable \*

Explosive properties: Non-applicable \*

Oxidising properties: Non-applicable \*

**Flammability:**

Flash Point: Non Flammable (&gt;60 °C)

Heat of combustion: Non-applicable \*

Flammability (solid, gas): Non-applicable \*

Autoignition temperature: 380 °C

Lower flammability limit: Non-applicable \*

Upper flammability limit: Non-applicable \*

**Explosive:**

Lower explosive limit: Non-applicable \*

Upper explosive limit: Non-applicable \*

**9.2 Other information:**

Surface tension at 20 °C: Non-applicable \*

Refraction index: Non-applicable \*

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

**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	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:**See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects:**

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

**Dangerous health implications:**

- CONTINUED ON NEXT PAGE -



## EPOXY HARDENER UNIVERSAL NEW

Printing: 18/01/2021

Date of compilation: 23/11/2017

Revised: 18/01/2021

Version: 4 (Replaced 3)

## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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:

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 CAS: 38294-64-3 EC: 500-101-4	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg	Rat
	LD50 dermal	2500 mg/kg	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Salicylic acid CAS: 69-72-7 EC: 200-712-3	LD50 oral	891 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation



**EPOXY HARDENER UNIVERSAL NEW**

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Date of compilation: 23/11/2017

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Version: 4 (Replaced 3)

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	1030 mg/kg	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	>20 mg/L (4 h)	

**SECTION 12: ECOLOGICAL INFORMATION**

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

**12.1 Toxicity:**

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LC50	110 mg/L (96 h)	Leuciscus idus	Fish
	EC50	388 mg/L (48 h)	N/A	Crustacean
	EC50	Non-applicable		
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LC50	646 mg/L (48 h)	Leuciscus idus	Fish
	EC50	400 mg/L (24 h)	Daphnia magna	Crustacean
	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 CAS: 38294-64-3 EC: 500-101-4	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
	BOD5	COD	Concentration	Period
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	BOD5	Non-applicable	7 mg/L	28 days
	COD	Non-applicable	28 days	
	BOD5/COD	Non-applicable	% Biodegradable	8 %
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BOD5	Non-applicable	100 mg/L	14 days
	COD	Non-applicable	14 days	
	BOD5/COD	Non-applicable	% Biodegradable	94 %

**12.3 Bioaccumulative potential:**

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

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
	Koc	Conclusion	Henry	Surface tension
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Koc	928	Henry	4,46E-4 Pa·m³/mol
	Conclusion	Low	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3,679E-2 N/m (25 °C)	Moist soil	Non-applicable
Salicylic acid CAS: 69-72-7 EC: 200-712-3	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,444E-2 N/m (207,25 °C)	Moist soil	Non-applicable

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**EPOXY HARDENER UNIVERSAL NEW**

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Date of compilation: 23/11/2017

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**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, 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 recommend 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 2019 and RID 2019:



- 14.1 UN 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 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:



- 14.1 UN 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 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**EPOXY HARDENER UNIVERSAL NEW**

Printing: 18/01/2021

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**SECTION 14: TRANSPORT INFORMATION (continued)****Transport of dangerous goods by air:**

With regard to IATA/ICAO 2021:



<b>14.1 UN number:</b>	UN1760
<b>14.2 UN proper shipping name:</b>	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
<b>14.3 Transport hazard class(es):</b>	8
Labels:	8
<b>14.4 Packing group:</b>	II
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	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 ....):**

Non-applicable

**Specific provisions in terms of protecting people or the environment:**

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

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION****Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

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

- Precautionary statements

**Texts of the legislative phrases mentioned in section 2:**



## EPOXY HARDENER UNIVERSAL NEW

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### SECTION 16: OTHER INFORMATION (continued)

H314: Causes severe skin burns and eye damage.  
 H318: Causes serious eye damage.  
 H317: May cause an allergic skin reaction.  
 H412: Harmful to aquatic life with long lasting effects.

#### 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+H312 - Harmful if swallowed or in contact with skin.  
 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.

#### Classification procedure:

Skin Corr. 1B: Calculation method  
 Eye Dam. 1: Calculation method  
 Skin Sens. 1: Calculation method  
 Aquatic Chronic 3: 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: 5-day biochemical oxygen demand  
 BCF: Bioconcentration factor  
 LD50: Lethal Dose 50  
 LC50: Lethal Concentration 50  
 EC50: Effective concentration 50  
 Log-POW: Octanol-water partition coefficient  
 Koc: Partition coefficient of organic carbon

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 -