



EPOXY HARDENER UNIVERSAL

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

- 1.1 Product identifier:** EPOXY HARDENER UNIVERSAL
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: 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.
Zabrowo 14A
78-120 Goscino - Zachodniopomorskie - Polska
Phone.: +48 94 35 123 94 -
Fax: +48 94 35 126 22
troton@troton.com.pl
www.troton.pl
- 1.4 Emergency telephone number:** (czynny od 8:00-16:00)+48 094 35 123 94; 112

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) n° 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410

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. 1B: Sensitisation, skin, Category 1B, H317

2.2 Label elements:

CLP Regulation (EC) n° 1272/2008:

Danger



Hazard statements:

Aquatic Chronic 1: H410 - Very 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. 1B: 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

P260: Do not breathe dust/fume/gas/mist/vapours/spray

P271: Use only outdoors or in a well-ventilated area

P280: Wear protective gloves/protective clothing/eye protection/face protection

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

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

P308+P313: IF exposed or concerned: Get medical advice/attention

P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Supplementary information:

EUH071: Corrosive to the respiratory tract

Substances that contribute to the classification

4-tert-butylphenol; m-phenylenebis(methylamine); Trimethylhexane-1,6-diamine; 4-nonylphenol, branched

2.3 Other hazards:

Non-applicable



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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) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 98-54-4 EC: 202-679-0 Index: 604-090-00-8 REACH:01-2119489419-21-XXXX	4-tert-butylphenol Regulation 1272/2008 Aquatic Chronic 1: H410; Eye Dam. 1: H318; Repr. 2: H361; Skin Irrit. 2: H315 - Danger	Self-classified 10 - <25 %
CAS: 1477-55-0 EC: 216-032-5 Index: Non-applicable REACH:01-2119480150-50-XXXX	m-phenylenebis(methylamine) Regulation 1272/2008 Acute Tox. 4: H302+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1B: H317; EUH071 - Danger	Self-classified 10 - <25 %
CAS: 25620-58-0 EC: 247-134-8 Index: Non-applicable REACH:Non-applicable	Trimethylhexane-1,6-diamine Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	Self-classified 5 - <10 %
CAS: 84852-15-3 EC: 284-325-5 Index: 601-053-00-8 REACH:01-2119510715-45-XXXX	4-nonylphenol, branched Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Repr. 2: H361fd; Skin Corr. 1B: H314 - Danger	ATP CLP00 1 - <2,5 %

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 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, it is recommended in case of intoxication symptoms 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, as 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 its inhalation, to the respiratory system. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administrate 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:



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SECTION 5: FIREFIGHTING MEASURES (continued)

Product is non-flammable under normal conditions of storage, manipulation and use. 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. IT IS NOT RECOMMENDED to use tap 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 individual respiratory equipment. 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. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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

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, manipulation 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

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security 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 containers of small amounts. 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

Maximum Temp.: 20 °C



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SECTION 7: HANDLING AND STORAGE (continued)

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 work environment

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

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
4-tert-butylphenol CAS: 98-54-4 EC: 202-679-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,071 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,5 mg/m ³	Non-applicable
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	15 mg/kg	Non-applicable	7,5 mg/kg	Non-applicable
	Inhalation	1 mg/m ³	Non-applicable	0,5 mg/m ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
4-tert-butylphenol CAS: 98-54-4 EC: 202-679-0	Oral	Non-applicable	Non-applicable	0,026 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,026 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,09 mg/m ³	Non-applicable
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	Oral	0,4 mg/kg	Non-applicable	0,08 mg/kg	Non-applicable
	Dermal	7,6 mg/kg	Non-applicable	3,8 mg/kg	Non-applicable
	Inhalation	0,8 mg/m ³	Non-applicable	0,4 mg/m ³	Non-applicable

PNEC:

Identification					
4-tert-butylphenol CAS: 98-54-4 EC: 202-679-0	STP	1,5 mg/L	Fresh water	0,01 mg/L	
	Soil	0,324 mg/kg	Marine water	0,001 mg/L	
	Intermittent	0,048 mg/L	Sediment (Fresh water)	0,975 mg/kg	
	Oral	46,67 g/kg	Sediment (Marine water)	0,0975 mg/kg	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	STP	10 mg/L	Fresh water	0,094 mg/L	
	Soil	0,045 mg/kg	Marine water	0,0094 mg/L	
	Intermittent	0,152 mg/L	Sediment (Fresh water)	0,43 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,043 mg/kg	
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	STP	9,5 mg/L	Fresh water	0,000614 mg/L	
	Soil	2,3 mg/kg	Marine water	0,000527 mg/L	
	Intermittent	0,00017 mg/L	Sediment (Fresh water)	4,62 mg/kg	
	Oral	2,36 g/kg	Sediment (Marine water)	1,23 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 Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection 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.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

B.- Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	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		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	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	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2001 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 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		EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

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 °C: Liquid

Appearance: Dense

*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)

Colour:	■ Grey
Odour:	Characteristic
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	257 °C
Vapour pressure at 20 °C:	1 Pa
Vapour pressure at 50 °C:	14 Pa (0 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1550 kg/m ³
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	9,6 cP
Kinematic viscosity at 20 °C:	6,49 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 *
Solubility in water at 20 °C:	Non-applicable *
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 (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	372 °C
Lower flammability limit:	Non-applicable *
Upper flammability 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

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SECTION 10: STABILITY AND REACTIVITY (continued)

10.5 Incompatible materials:

Acids	Water	Combustive 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 (CO₂), 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:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health 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, its consumption causes burns destroying the full thickness of fabrics. For more information on the secondary effects of contact with the skin 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.
- 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:



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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
4-tert-butylphenol CAS: 98-54-4 EC: 202-679-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	2288 mg/kg	Rabbit
	LC50 inhalation	>5 mg/L (4 h)	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	LD50 oral	1412 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
Trimethylhexane-1,6-diamine CAS: 25620-58-0 EC: 247-134-8	LD50 oral	910 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	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
4-tert-butylphenol CAS: 98-54-4 EC: 202-679-0	LC50	5.14 mg/L (96 h)	Pimephales promelas	Fish
	EC50	4.8 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	11.2 mg/L (72 h)	Scenedesmus subspicatus	Algae
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LC50	88 mg/L (96 h)	Oryzias latipes	Fish
	EC50	15 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	20 mg/L (72 h)	Selenastrum capricornutum	Algae
Trimethylhexane-1,6-diamine CAS: 25620-58-0 EC: 247-134-8	LC50	1000 mg/L (96 h)	Danio rerio	Fish
	EC50	Non-applicable		
	EC50	29.5 mg/L (72 h)	Scenedesmus subspicatus	Algae
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	LC50	0.05 mg/L (96 h)	Acipenser oxyrinchus	Fish
	EC50	0.14 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1.3 mg/L (72 h)	Scenedesmus subspicatus	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BOD5	Non-applicable	Concentration	14 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	49 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BCF	3
	Pow Log	0.18
	Potential	Low
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	BCF	231
	Pow Log	5.4
	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	Koc	1300	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
4-nonylphenol, branched CAS: 84852-15-3 EC: 284-325-5	Koc	22000	Henry	11,02 Pa·m ³ /mol
	Conclusion	Immobile	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes



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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 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*	Waste paint and varnish containing organic solvents or other dangerous substances	Dangerous

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

HP14 Ecotoxic, HP4 Irritant — skin irritation and eye damage, HP8 Corrosive, HP13 Sensitising, HP10 Toxic for reproduction

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) n°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 2015 and RID 2015:



- 14.1 UN number:** UN1760
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, N.O.S.
- 14.3 Transport hazard class(es):** 8
- Labels:** 8
- 14.4 Packing group:** II
- 14.5 Dangerous for the environment:** Yes
- 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 38-16:

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN1760
14.2 UN proper shipping name: CORROSIVE LIQUID, N.O.S.
14.3 Transport hazard class(es): 8
Labels: 8
14.4 Packing group: II
14.5 Dangerous for the environment: Yes
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
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



- 14.1 UN number:** UN1760
14.2 UN proper shipping name: CORROSIVE LIQUID, N.O.S.
14.3 Transport hazard class(es): 8
Labels: 8
14.4 Packing group: II
14.5 Dangerous for the environment: Yes
14.6 Special precautions for user
Physico-Chemical properties: see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): 4-nonylphenol, branched

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

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains 4-nonylphenol, branched

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



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SECTION 15: REGULATORY INFORMATION (continued)

Contains more than 0.1 % of 4-nonylphenol, branched by weight. Shall not be placed on the market, or used, as substances or in mixtures in concentrations equal to or greater than 0,1 % by weight for the following purposes:

(1) industrial and institutional cleaning except:

- controlled closed dry cleaning systems where the washing liquid is recycled or incinerated,
- cleaning systems with special treatment where the washing liquid is recycled or incinerated.

(2) domestic cleaning;

(3) textiles and leather processing except:

- processing with no release into waste water,
- systems with special treatment where the process water is pre-treated to remove the organic fraction completely prior to biological waste water treatment (degreasing of sheepskin);

(4) emulsifier in agricultural teat dips;

(5) metal working except:

uses in controlled closed systems where the washing liquid is recycled or incinerated;

(6) manufacturing of pulp and paper;

(7) cosmetic products;

(8) other personal care products except:

spermicides;

(9) co-formulants in pesticides and biocides. However national authorisations for pesticides or biocidal products containing nonylphenol ethoxylates as co-formulant, granted before 17 July 2003, shall not be affected by this restriction until their date of expiry.

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 data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, 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:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

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

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H361: Suspected of damaging fertility or the unborn child

H410: Very toxic to aquatic life with long lasting effects

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) n° 1272/2008:



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SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H302 - Harmful if swallowed
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very 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
Repr. 2: H361 - Suspected of damaging fertility or the unborn child
Repr. 2: H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
Skin Corr. 1B: 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. 1B: H317 - May cause an allergic skin reaction

Classification procedure:

Skin Corr. 1B: Calculation method
Eye Dam. 1: Calculation method
Repr. 2: Calculation method
Aquatic Chronic 1: Calculation method
Skin Sens. 1B: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://esis.jrc.ec.europa.eu>
<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.