

according to Commission Regulation (EU) 2020/878 as amended

**S7300 EPOLEX HARDENER**

Creation date	16th December 2022	Version	1.0
Revision date			

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1. Product identifier** S7300 EPOLEX HARDENER  
Substance / mixture mixture  
UFI 5AQV-Q0YS-5005-NRVP
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**  
Hardener for two-component epoxy paints EPOLEX (component B).  
**Mixture uses advised against**  
The product should not be used in ways other than those referred in Section 1.  
Exposure scenario is attached to the Safety Data Sheet.
- 1.3. Details of the supplier of the safety data sheet**  
**Manufacturer**  
Name or trade name BARVY A LAKY TELURIA,s.r.o.  
Address č.p.1, Skrchov, 679 61  
Czech Republic  
Identification number (CRN) 43420371  
VAT Reg No CZ43420371  
Phone +420 516 474 211  
E-mail info@teluria.cz  
Web address http://www.bal.cz
- Competent person responsible for the safety data sheet**  
Name BARVY A LAKY TELURIA,s.r.o.  
E-mail info@teluria.cz
- 1.4. Emergency telephone number**  
European emergency number: 112

**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**  
The mixture is classified as dangerous.

Flam. Liq. 3, H226  
Acute Tox. 4, H302  
Skin Corr. 1, H314  
Skin Sens. 1, H317  
Eye Dam. 1, H318  
STOT SE 3, H335  
STOT RE 2, H373  
Aquatic Acute 1, H400  
Aquatic Chronic 1, H410

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse physico-chemical effects**

Flammable liquid and vapour.

**Most serious adverse effects on human health and the environment**

Causes serious eye damage. May cause an allergic skin reaction. Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Harmful if swallowed. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

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### 2.2. Label elements

#### Hazard pictogram



#### Signal word

Danger

#### Hazardous substances

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with triethylenetetramine xylene ( mixture of isomers and ethylbenzene )  
2-methylpropan-1-ol  
2-ethylhexyl acrylate

#### Hazard statements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye 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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P501	Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.

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Density	0,95 g/cm <sup>3</sup> při 25 °C
VOC	0,49-0,51 kg/kg
TOC	0,40-0,42 kg/kg

### Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger. Container must be fitted with child-resistant fastening.

### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Substances are neither listed in Annex XIV of REACH nor on the REACH candidate list of substances of very high concern (SVHC).

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Polyamine aduct.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 38294-69-8 EC: 500-104-0 Registration number: 04-2120823725-53	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with triethylenetetramine	45-55	Acute Tox. 4, H302 Skin Corr. 1, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
EC: 905-562-9 Registration number: 01-2119555267-33	xylene ( mixture of isomers and ethylbenzene )	35-45	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373	1, 3
Index: 603-108-00-1 CAS: 78-83-1 EC: 201-148-0 Registration number: 01-2119484609-23	2-methylpropan-1-ol	5-10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335, H336	
Index: 607-107-00-7 CAS: 103-11-7 EC: 203-080-7 Registration number: 01-2119453158-37	2-ethylhexyl acrylate	1-5	Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412	2

#### Notes

- Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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- Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".
- A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

##### If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

##### If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse cautiously with water for several minutes.

##### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

##### If swallowed

RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

#### 4.2. Most important symptoms and effects, both acute and delayed

##### If inhaled

Inhaling vapours can cause corrosion of the breathing system. Cough, headache. May cause respiratory irritation.

##### If on skin

Causes severe skin burns. May cause an allergic skin reaction.

##### If in eyes

Causes serious eye damage.

##### If swallowed

Corrosion of the digestion system can occur.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment. If you see a doctor, take this safety data sheet with you.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

##### Unsuitable extinguishing media

Water - full jet.

#### 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

For workers apart from emergency teams: Avoid inhalation of vapour, prevent skin and eye contact. Wear appropriate protective clothing and gloves. Wear eye protection and face shield if necessary. Use suitable respiratory protection. In closed spaces, ensure fresh air supply. Eliminate all ignition sources. No smoking and no open fire. Keep unnecessary personnel away.

For members of emergency teams: Use appropriate personal protective equipment – protective clothing with antistatic finish and impermeable work shoes. Treat unprotected skin with barrier cream. Anti-chemical protective gloves. For short-time exposure or low concentration, use respirator with organic vapour and dust filter (protection level A/P2); for high concentration and long-term exposure, self-contained respirator is necessary.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. If possible prevent leakage, close container and place damaged container in protective container.

#### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### 7.1.1. General health measures

Use the product after due familiarization with its hazard characteristics and proper training or training in its safe use. Do not eat, drink, smoke on the site. Wash your hands and other contaminated parts of body by soap and water before eating and after the use of product is finished. Abide by requirements on personal hygiene when working with hazardous chemical products.

Use technical equipment on the site to control human and environment exposure. Regularly inspect the equipment, ensure cleaning, timely maintenance and permanent functionality. When working, use the recommended personal protective equipment listed in 8.2 of the Safety Data Sheet and in Annex to the Safety Data Sheet. Keep the protective clothing and protective equipment sound and clean. Immediately replace the damaged protective aids for sound ones. Keep the site, tools and aids clean and in sound state. On the site, keep the product in labelled containers or tanks. Store product waste and wastes contaminated by the product in suitable and properly labelled vessels located on designated marked and protected places. Ensure long-term storing of wastes containing the product outside the site.

##### 7.1.2. Fire precautions

When using the product, prevent potential ignition or explosion of the mixture of product vapour and air caused by contact with open flame, sparks, extremely hot surfaces, electrostatic discharges. Do not smoke on the site, use non-sparking tools. Places with increased occurrence of the vapour-air mixture need to be ventilated to prevent formation of explosive mixtures. Solvent vapours are heavier than air. The site should be protected from electrostatic discharges.

##### 7.1.3. Environmental precautions

Handle the product on a site technically adapted to avoid accidental leakage to sewerage systems, water or soil. Product waste and wastes contaminated by the product to be disposed of as hazardous waste. Waste water contaminated by the product may only be discharged to water reservoirs after the product components are properly removed in a waste water treatment plant or in other appropriate treatment plant able to remove drifted product components from water. Do not pour the product to waste water. Emissions of solvent from point sources are subjected to control requirements acc. to air protection regulations.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store the product in properly marked, closed containers in well ventilated spaces at 5 – 25 °C. The storages must meet the requirements on storing of flammable liquids and substances hazardous for aquatic life and soil. Protect from heat, hot surfaces, sparks, open flame and other ignition sources. No smoking. Store away from oxidising substances and strong acids. Do not store with food, drinks, feed material, medicines. Storages should be protected from static electricity. First aid kit and water suitable for eye rinsing should be available. Keep away from products that are corrosive to metals (eg acids or pool chemicals).

Storage class	3A - Flammable liquids (flash point below 55 °C)
Storage temperature	min 5 °C, max 25 °C

#### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

#### 7.3. Specific end use(s)

Use in coating compositions was assessed for xylene and 2-methylpropan-1-ol. Conditions of safe use of the registered coating composition components specified in exposure scenarios to SDSs of the components are incorporated to this Safety Data Sheet and its Annex.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

##### European Union

##### Commission Directive 2000/39/EC

Substance name (component)	Type	Value	Note
xlenes	OEL 8 hours	221 mg/m <sup>3</sup>	Skin

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**European Union**
**Commission Directive 2000/39/EC**

Substance name (component)	Type	Value	Note
xylenes	OEL 8 hours	50 ppm	Skin
	OEL 15 minutes	442 mg/m <sup>3</sup>	
	OEL 15 minutes	100 ppm	

**DNEL**

## 2-methylpropan-1-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	310 mg/m <sup>3</sup>	Chronic effects local		
Consumers	Inhalation	55 mg/m <sup>3</sup>	Chronic effects local		

## xylene ( mixture of isomers and ethylbenzene )

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	221 mg/m <sup>3</sup>	Chronic effects systemic		
Workers	Inhalation	442 mg/m <sup>3</sup>	Acute effects systemic		
Workers	Inhalation	442 mg/m <sup>3</sup>	Acute effects local		
Workers	Dermal	212 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	65.3 mg/m <sup>3</sup>	Chronic effects systemic		
Consumers	Inhalation	260 mg/m <sup>3</sup>	Acute effects systemic		
Consumers	Inhalation	260 mg/m <sup>3</sup>	Acute effects local		
Consumers	Dermal	125 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	12.5 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	221 mg/m <sup>3</sup>	Chronic effects local		
Consumers	Inhalation	65.3 mg/m <sup>3</sup>	Chronic effects local		

**PNEC**

## 2-ethylhexyl acrylate

Route of exposure	Value	Value determination	Source
Freshwater environment	0.00272 mg/l		
Marine water	0.00027 mg/l		
Water (intermittent release)	0.011 mg/l		
Freshwater sediment	0.126 mg/kg of food		
Sea sediments	0.0126 mg/kg of food		
Soil (agricultural)	1 mg/kg of dry substance of soil		

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## 2-ethylhexyl acrylate

Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	2.3 mg/l		

## 2-methylpropan-1-ol

Route of exposure	Value	Value determination	Source
Freshwater environment	0.4 mg/l		
Marine water	0.04 mg/l		
Water (intermittent release)	11 mg/l		
Microorganisms in sewage treatment	10 mg/l		
Freshwater sediment	1.56 mg/kg of food		
Sea sediments	0.156 mg/kg of food		
Soil (agricultural)	0.0765 mg/kg of dry substance of soil		

## xylene ( mixture of isomers and ethylbenzene )

Route of exposure	Value	Value determination	Source
Drinking water	0.327 mg/l		
Marine water	0.327 mg/l		
Water (intermittent release)	0.327 mg/l		
Microorganisms in sewage treatment	6.58 mg/l		
Freshwater sediment	12.46 mg/kg of food		
Sea sediments	12.46 mg/kg of food		
Soil (agricultural)	2.31 mg/kg of dry substance of soil		



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### 8.2. Exposure controls

Conditions of safe use of the registered product composition components specified in exposure scenarios to Safety Data Sheets of the components are given in Annex of the SDS, including the required additional measures restricting the exposure – see the exposure scenarios for the intended uses of the product.

General safety and hygienic measures. When working, do not eat, drink, smoke. Before the break and after the work, hands should be washed with soap and hot water, treated with barrier cream. Overall and local ventilation, effective extraction.

#### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Skin protection: Protective clothes with antistatic finish, protective shoes; treat unprotected skin with barrier cream.

Hand protection: Chemical resistant protective gloves (EN 374-1:2003). Suitable material – PVA, fluoroelastomere and others, time of penetration corresponding to > 480 minutes. The time of penetration specified by the manufacturer should be followed and the glove replaced after expiration. If damaged, the gloves should be replaced immediately.

The selection of suitable protective gloves does not only depend on their material, but also on other qualitative features. Furthermore, since the mixture can be used for various purposes, mixed with other substances, the suitability of gloves for all purposes cannot be predetermined and must be verified in particular use.

#### Respiratory protection

Don't breathe vapours. For short-time exposure or low concentration, use respirator with organic vapour and dust filter (protection level A/P2); for high concentration and long-term exposure, self-contained respirator is necessary.

#### Thermal hazard

Not available.

#### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Ensure that containers are properly closed during storage, handling and transport. Secure storage areas against possible leakage of product into the environment (sewerage, water, soil - see 6.2). Do not flush product into drains or watercourses.

#### More information

Exposure scenario is attached to the Safety Data Sheet.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	yellow
color intensity	transparent
Odour	containing ammoniac
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	Flammable liquid and vapour.
Lower and upper explosion limit	data not available
Flash point	23 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-soluble (in water)
Kinematic viscosity	>20,5 mm <sup>2</sup> /s at 40 °C
Solubility in water	data not available
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available

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Density and/or relative density

Density

 0,95 g/cm<sup>3</sup> at 25 °C

Relative vapour density

data not available

Particle characteristics

data not available

### 9.2. Other information

Evaporation rate

data not available

Oxidising properties

The product has no oxidizing properties.

Content of organic solvents (VOC)

0,49-0,51 kg/kg

Total organic carbon (TOC)

0,40-0,42 kg/kg

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

When used in the standard way, there is not any dangerous reaction with other substances.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Unknown.

### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

#### Acute toxicity

Harmful if swallowed. ATE (oral): 1000 mg/kg body weight.

2-ethylhexyl acrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>		4435 mg/kg bw		Rat ( <i>Rattus norvegicus</i> )	
Dermal	LD <sub>50</sub>		7522 mg/kg bw		Rabbit	

2-methylpropan-1-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Inhalation	LC <sub>50</sub>		> 18.18 mg/l of air	6 hours	Rat ( <i>Rattus norvegicus</i> )	F/M

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xylene ( mixture of isomers and ethylbenzene )

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>	EU B.1	3523 mg/kg bw		Rat (Rattus norvegicus)	M
Inhalation	LC <sub>50</sub>	EU B.2	27124 mg/m <sup>3</sup>	4 hours	Rat (Rattus norvegicus)	M
Dermal	LD <sub>50</sub>		12126 mg/kg bw		Rabbit	

### Skin corrosion/irritation

Causes severe skin burns and eye damage.

### Serious eye damage/irritation

Causes serious eye damage. Causes severe skin burns and eye damage.

### Respiratory or skin sensitisation

May cause an allergic skin reaction.

### Germ cell mutagenicity

Based on available data the classification criteria are not met.

### Carcinogenicity

Based on available data the classification criteria are not met.

### Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

May cause respiratory irritation.

### Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

Based on available data the classification criteria are not met.

### 11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Very toxic to aquatic life with long lasting effects.

2-ethylhexyl acrylate

Parameter	Value	Exposure time	Species	Environment
LC <sub>50</sub>	1.81 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC <sub>50</sub>	1.3 mg/l	48 hours	Crustaceans	
EC <sub>50</sub>	1.71 mg/l	72 hours	Algae (Selenastrum capricornutum)	

xylene ( mixture of isomers and ethylbenzene )

Parameter	Value	Exposure time	Species	Environment
LC <sub>50</sub>	2.6 mg/l	96 hours	Fish (Oncorhynchus mykiss)	

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xylene ( mixture of isomers and ethylbenzene )

Parameter	Value	Exposure time	Species	Environment
EC <sub>50</sub>	1 mg/l	48 hours	Daphnia (Daphnia magna)	
LC <sub>50</sub>	2.2 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

### Chronic toxicity

xylene ( mixture of isomers and ethylbenzene )

Parameter	Value	Exposure time	Species	Environment
NOEC	>1.3 mg/l	56 days	Fish (Oncorhynchus mykiss)	
NOEC	0.96-1.17 mg/l	7 days	Invertebrates (Ceriodaphnia dubia)	

### 12.2. Persistence and degradability

#### Biodegradability

xylene ( mixture of isomers and ethylbenzene )

Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301F	>90 %	28 days		Easily biodegradable

Data for mixture not available.

### 12.3. Bioaccumulative potential

2-ethylhexyl acrylate

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
BCF	270				

xylene ( mixture of isomers and ethylbenzene )

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
BCF	25900 ml/kg				
Log Pow	3.12-3.2				

Data for mixture not available.

### 12.4. Mobility in soil

xylene ( mixture of isomers and ethylbenzene )

Parameter	Value	Environment	Temperature
Koc	48-129		

Not available.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

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Possible impacts on the waste water treatment plant: the concentration of this substance in the waste water to be treated must be in a controlled mode in accordance with the sewage regulations. The mixture may contaminate soil and water and may damage the fauna and flora. According to the Water Management Act, Act No. 254/2001 Coll., The product is considered a dangerous substance and a dangerous substance according to Annex No. 1 of the Water Management Act. Prevent substance from entering groundwater, soil and sewage system.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

16 03 05 organic wastes containing hazardous substances \*

#### Packaging waste type code

15 01 10 packaging containing residues of or contaminated by hazardous substances \*

(\* ) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

### SECTION 14: Transport information

#### 14.1. UN number or ID number

UN 2734

#### 14.2. UN proper shipping name

AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (polyamine aduct )

#### 14.3. Transport hazard class(es)

8 Corrosive substances

#### 14.4. Packing group

II - substances presenting medium danger

#### 14.5. Environmental hazards

The product is dangerous for the environment.

#### 14.6. Special precautions for user

Reference in the Sections 4 to 8. The product is transported in ordinary and covered means of transport, protected against the weather, shocks and falls.

#### 14.7. Maritime transport in bulk according to IMO instruments

Not classified.

according to Commission Regulation (EU) 2020/878 as amended

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### Additional information

Hazard identification No.  
UN number  
Classification code  
Safety signs

83
2734

CF1  
8+3+hazardous for the environment



### Air transport - ICAO/IATA

Packaging instructions passenger	851
Cargo packaging instructions	855

### Marine transport - IMDG

EmS (emergency plan)	F-E, S-C
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## SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended.

### 15.2. Chemical safety assessment

Chemical safety assessment was carried out on substances xylene and 2-methylpropan-1-ol. The respective exposure scenarios are incorporated in Annex of this Safety Data Sheet.

## SECTION 16: Other information

### A list of standard risk phrases used in the safety data sheet

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H312+H332	Harmful in contact with skin or if inhaled.

according to Commission Regulation (EU) 2020/878 as amended

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**Guidelines for safe handling used in the safety data sheet**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye 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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P501	Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
log K <sub>ow</sub>	Octanol-water partition coefficient
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic

according to Commission Regulation (EU) 2020/878 as amended

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ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

The product is exclusively intended for use in installations authorised according to Directive 1999/13/EC where emission limiting measures provide alternative means of achieving at least equivalent VOC emission reductions.

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**More information**

Classification procedure - calculation method.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.



## Annex to the Product Safety Data Sheet - EXPOSURE SCENARIO

### 1. Industrial use

Application sector	: SU 3
Chemical product category	: PC9a
Partial processes covered by exposure scenario:	PROC1, PROC2, PROC 3, PROC4, PROC5, PROC 7, PROC8a, PROC8b, PROC10, PROC13, PROC15
Environmental release	: ERC4

#### Basic conditions to control the hazard for workers:

Duration of work activities	: Covers exposure up to 8 h/d (unless otherwise specified)
Concentration	: Work with the hardener, the hardened standard coating composition or coating composition thinned by solvents containing the same volatile components as the coating composition is anticipated.
Temperature	: Work at temperature up to 20 °C higher than site temperature is anticipated except for the coating composition's drying and hardening processes at increased temperature.
General risk management measures	: Wear protective working clothes. Wear protective gloves and eye protection if in danger of contact with the hardener and the hardened coating composition. Basic training required. Abide by general principles of safe and hygienic work with chemical substances.
Site where the activities are performed	: Indoor use is anticipated.

#### Additional requirements to control the hazard for workers carrying out partial work activities:

Partial work activities with the product (Partial contributing scenarios)	Process category	Required additional measures to control worker exposure
Pumping from/to containers and devices within a closed system with no possibility to release emission	PROC 1 Use within closed production process	Irrelevant.
Pumping the hardener and the hardened coating composition from/to containers and devices at non dedicated facility with potential human and environment exposure	PROC 8a Transfer of the product (charging / discharging) to/from vessels/large containers at non dedicated facilities	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Pumping the hardener and the hardened coating composition from/to containers and devices at non dedicated facility with potential human and environment exposure	PROC 8b Transfer of the product (charging / discharging) to/from vessels/large containers at dedicated facilities	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Mixing, blending, thinning of the hardener and the hardened coating composition in open devices with possible exposure to volatile components of the coating composition	PROC5 Mixing or blending in batch processes at mixture manufacturing (excl. charging and discharging of vessels).	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Application by spraying.	PROC 7 Industrial spraying.	Robotic spraying in closed chambers or closed cabs with laminar extraction. In course of spraying, enter the chambers only with self-contained respirator.  Manual spraying in spraying chambers with laminar flow of extracted air directed from the worker or in intensively ventilated spaces (5-10 air exchanges per hour) with respiratory protection (half-face or full-face respirator) provided with type A/P2 filter.
Manual hardened coating composition application by roller, brush or palette knife.	PROC 10 Roller, palette knife or brush application	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Dipping or pouring application of hardened coating composition.	PROC 13 Treatment of articles by dipping and pouring	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Free drying of hardened coating composition film at standard or slightly increased ambient temperature (by max. 20 °C)	PROC 4 Use within batch or other process where opportunity for exposure arises	Carry out in well ventilated spaces (3-5 air exchanges per hour).
Continuous drying and hardening processes of the hardened coating composition film at increased temperature in drying tunnels equipped with vapour extraction	PROC 2 Use within continuous chemical production process with occasional controlled exposure (e.g. at sampling).	Does not require further risk control measures.
Batch drying and hardening processes of the hardened coating composition film at increased temperature in extracted chambers	PROC 3 Use within closed batch process of mixture manufacturing.	Does not require further risk control measures.
Machine cleaning and washing of closed tanks, containers and devices equipped with vapour extraction	PROC 3 Use within closed batch process of mixture manufacturing	Does not require further risk control measures.

Manual cleaning of small containers, application devices and tools	PROC 10 Roller, palette knife or brush application (by a tool held in hand) PROC8a Transfer of the product (charging / discharging) to/from vessels/large containers at non dedicated facilities	Local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour).
Laboratory checks on the hardener and the coating composition	PROC 15 Use as laboratory reagent (laboratory work with the product)	Good ventilation (3 – 5 air exchanges per hour).
Activities involving product waste and waste contaminated by the product		If in risk of contact with waste, wear protective gloves. Store the waste in closable containers stored in well ventilated storages or outdoor.

#### Additional requirements to control environmental hazards

Air emission control	When spraying, remove fly coating mist from the air extracted from the work site. If the limits for solvent consumption defined in Ordinance no. 415/2012 Coll. are exceeded, use solvent recuperation from waste air or remove the solvents by incineration or other processes guaranteeing observation of emission parameters specified in air protection regulations.
Water emission control	Store the hardener, the coating and waste contaminated by coat in buildings structurally protected from leakage release and emergency release to surface and ground water. Treat water contaminated by coat compounds and remove solid impurities and organic compounds by sedimentation, filtration, biological treatment processes or special processes developed for treatment of water contaminated by coating compositions before discharging to surface water. When discharging the treated waste water, observe the contamination parameters specified for the involved facility by water management authority.
Disposal of waste	Dispose of hardener and coat waste and materials contaminated by coat and its compounds in cooperation with authorised persons as of hazardous waste. Dispose of solvent waste from tools and device cleaning as of hazardous waste. Prevent release or discharge of any liquid waste to surface and ground water unless it is treated and coating composition compounds are removed.

## 2. Professional use

Application sector	: SU 22
Chemical product category	: PC9a
Partial processes covered by exposure scenario:	PROC 3, PROC4, PROC5, PROC 7, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19
Environmental release	: ERC 8a, ERC 8d

#### Basic conditions to control the hazard for workers:

Duration of work activities	: Covers exposure up to 8 h/d (unless otherwise specified)
Concentration	: Work with hardener and standard hardened coating composition or coating composition thinned by solvents containing the same volatile components as the coating composition is anticipated.
Temperature	: Work at temperature up to 20 °C higher than site temperature is anticipated except for the hardened coating composition's drying and hardening processes at increased temperature.
General risk management measures	: Wear protective working clothes. Wear protective gloves and eye protection if in danger of contact with the hardener and the hardened coating composition. Basic training required. Abide by general principles of safe and hygienic work with chemical substances.
Site where the activities are performed	: Indoor and outdoor use is anticipated.

#### Additional requirements to control the hazard for workers carrying out partial work activities:

Partial work activities with the product (Partial contributing scenarios)	Process category	Required additional measures to control worker exposure
Pumping the hardener and the hardened coating composition from/to containers and devices at non dedicated facility with potential human and environment exposure	PROC 8a Transfer of the product (charging / discharging) to/from vessels/large containers at non dedicated facilities	Indoor: local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour). Outdoor: secure catch dripping paint
Pumping the hardener and the hardened coating composition from/to containers and devices at non dedicated facility with potential human and environment exposure	PROC 8b Transfer of the product (charging / discharging) to/from vessels/large containers at dedicated facilities	Indoor: local air extraction at potential emission release or good ventilation (5 - 10 air exchanges per hour). Outdoor: does not require further risk control measures

Mixing, blending, thinning of hardener and the hardened coating composition in open devices with possible exposure to volatile components of the coating composition	PROC5 Mixing or blending in batch processes at mixture manufacturing (excl. charging and discharging of vessels).	Indoor: local air extraction at potential emission release or good ventilation (3-5 air exchanges per hour). Outdoor: working process a maximum of 4h per day does not require further risk control measures or use respiratory protection with filter type A.
Application by spraying.	PROC 11 Non industrial spraying.	Indoor: do spraying in spraying chambers with laminar flow of extracted air directed from the worker or in intensively ventilated spaces (5-10 air exchanges per hour) with respiratory protection (half-face or full-face respirator) provided with type A/P2 filter. Outdoor: use respiratory protection with filter type A/P2.
Manual hardened coating composition application by roller, brush or palette knife.	PROC 10 Roller, palette knife or brush application	Indoor: local air extraction at potential emission release or good ventilation (5 - 10 air exchanges per hour). Outdoor: does not require further risk control measures
Dipping or pouring application of hardened coating composition.	PROC 13 Treatment of articles by dipping and pouring	Indoor: local air extraction at potential emission release or good ventilation (5 - 10 air exchanges per hour). Outdoor: use respiratory protection with filter type A.
Free drying of hardened coating composition film at standard or slightly increased ambient temperature (by max. 20 °C)	PROC 4 Use within batch or other process where opportunity for exposure arises	Indoor: carry out in well ventilated spaces (5 -- 10 air exchanges per hour). Outdoor: does not require further risk control measures
Batch drying and hardening processes of the hardened coating composition film at increased temperature in extracted chambers	PROC 3 Use within closed batch process of mixture manufacturing.	Does not require further risk control measures.
Machine cleaning and washing of closed tanks, containers and devices equipped with vapour extraction	PROC 3 Use within closed batch process of mixture manufacturing	Does not require further risk control measures.
Manual cleaning of small containers, application devices and tools	PROC 10 Roller, palette knife or brush application (by a tool held in hand)	Indoor: local air extraction at potential emission release or good ventilation (5 - 10 air exchanges per hour). Outdoor: does not require further risk control measures
Laboratory checks on the hardener and the hardened coating composition	PROC 15 Use as laboratory reagent (laboratory work with the product)	Good ventilation (3 – 5 air exchanges per hour).
Manual activities involving hand contact	PROC19 Hand-mixing with intimate contact and only PPE available	Indoor. Use protective gloves, local air extraction at potential emission release or good ventilation Outdoor: use protective gloves
Activities involving product waste and waste contaminated by the product		If in risk of contact with waste, wear protective gloves. Store the waste in closable containers stored in well ventilated storages or outdoor.

#### Additional requirements to control environmental hazards

Air emission control	Does not require special risk control measures
Water emission control	Store the hardener, paints and waste contaminated by paints in buildings structurally protected from leakage release and emergency release to surface and ground water. Clean up waste water contaminated by paints in the Municipal wastewater treatment plants before discharging to surface water or capture or dispose them as hazardous waste in cooperation with the authorized person. Overspray and drips paint as possible to capture and dispose as hazardous waste.
Disposal of waste	Prevent leakage or discharge of any liquid waste into surface and groundwater unless it is cleaned up from the paint compounds. Dispose of hardener waste, paint waste and materials contaminated by paints and its compounds in cooperation with authorised persons as of hazardous waste. Dispose of solvent waste from tools and device cleaning as of hazardous waste.