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#### **EPOXY PRIMER HARDENER 1:1**

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

1.1. Product ID EPOXY PRIMER HARDENER 1:1 UFI: 0VU0-D003-X008-V240\*

### 1.2. Identified uses of the substance or mixture that are relevant and uses not recommended

Hardener (component B) for curing epoxy primer. For professional use in car repainting.

### 1.3. Details of the safety data sheet provider

**RANAL Sp. z o.o.** Phone: +48 34 329 45 03 Hive. Łódzka 3 Fax: +48 34 320 12 16

42-240 Rudniki, PL Registration number: 000029202

Person responsible for the preparation of the safety data sheet: <a href="mail@ranal.pl">ranal@ranal.pl</a>

Distributor : Ada Color Ltd. 176 Brezovsko Shose Street, 4003 Plovdiv, Bulgaria

Mobile: +359896663052 Tel: +35932940456 Fax:+35932940457

web: adacolor-bg.com

# 1.4. Emergency phone number

+48 34 329 45 03 (from 8:00 to 15:00)

Further information: Bulgaria:

Toxicology Clinic at the Ni.I. Pirogov Hospital for Active

Treatment of Sick Patients Emergency Phone:

+359 02 9154 409 (during standard working hours except Saturday and Sunday)

+359 02 9154 346 (continuous service)

### **SECTION 2: HAZARD IDENTIFICATION**

### 2.1. Classification of the substance or mixture

The mixture is classified as hazardous in accordance with the applicable regulations – see section 15 of the safety data sheet.

Classification 1272/2008/EC:
Current Burns, Category 3

Acute toxicity (skin contact), category 4

Acute toxicity (after inhalation exposure: dust, mist), category 4

H332

Skin corrosion/irritation, category 2

H315

Serious eye damage/eye irritation, category 1

H318

Skin sensitization, category 1

H317

Hazardous to the aquatic environment – chronic hazard, category 2

H411

Full text of the H- and EUH statements: see Section 16.\*

Adverse effects related to physicochemical properties, effects on human health and the environment\*: No further information available.

### 2.2. Elements of the label

Contains xylene.

Contains butyl alcohol\*. Icons:



Hazard Warnings (CLP):

H226 Flammable liquid and vapors.

H312+H332 Harmful in contact with skin and if inhaled.

H315 It causes skin irritation.

H317 May cause allergic skin reaction.\* H318 It

causes serious eye damage.

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H411 Toxic to aquatic organisms, with a long-lasting effect.

Safety Recommendations (CLP):

P210 Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition.

Smoking is prohibited.

P261 Avoid inhaling fumes/aerosols.

Use only outdoors or in a well-ventilated area. P273Avoid

discharge into the environment.

P280 Use protective gloves/protective clothing/safety goggles/protective face mask.

P305+351+338 IN CONTACT WITH EYES: rinse gently with water for several minutes. Remove contact lenses, if any, and as far as

possible. Continue rinsing.

P312 If you are unwell, call the TOXICOLOGY CENTER/a doctor.

#### 2.3. Other hazards

P271

It does not contain PBT/vPvB substances ≥0,1% assessed in accordance with Annex XIII to REACH.

The mixture does not contain substances listed in accordance with Article 59(1) of the REACH Regulation due to their endocrine disrupting properties or has not been identified as an endocrine disruptor in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration, equal to or greater than 0.1% by weight.\*

#### **SECTION 3: COMPOSITION/INGREDIENT INFORMATION**

#### 3.1. Substances

Not applicable.

#### 3.2. Mixtures

Name	Product ID	%	Classification according to Regulation (EC) No 1272/2008 [CLP]
Xylene the substance has permissible exposure limits at the workplace (PL); substance with a maximum permitted concentration in the working environment at Community level * (note C) *	CAS Number: 1330-20-7 EC number: 215-535-7 Index number: 601-022-00-9 REACH No: 01-2119488216-32	50-60*	Flam. Liq. 3, H226 Acute Tox. 4 (кожа*), H312 Acute Tox. 4 (вдишване*), H332 Skin Irrit. 2, H315
Polyamimide	CAS Number: 68082-29-1 *	15 - 35*	Eye Dam. 1, H318
butyl alcohol  The substance has permissible exposure limits at the workplace (PL) *	CAS number: 71-36-3 EC Number: 200-751-6 Index number: 603-004-00-6 REACH No: 01-2119484630-38	10-15*	Flam. Liq. 3, H226 Acute Tox 4 (перорално*), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
phenol, 2,4,6-tri[[[3- (dimethylamino)propyl]amino]methyl] *	CAS Number: 225795-35-7 EC Number: 607-115-0	3 - 5	Acute Tox. 4 (перорално), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,6-Tris(dimethylaminomethyl)phenol*	CAS Number: 90-72-2 EC Number: 202-013-9 Index number: 603-069-00-0 REACH No: 01-2119560597-27	<1.5	Acute Tox. 4 (перорално), H302 Skin Irrit. 2, H315 Eye Irritates. 2, H319
N-(3-(trimethoxysilyl)propyl)ethylenediamine*	CAS Number: 1760-24-3 EC Number: 217-164-6 REACH No: 01-2119970215-39	≤ 1	Eye Dam. 1, H318 Skin Sens. 1, H317

Note C: Some organic matter is marketed as a specific isomer or as a mixture of several isomers. In this case, the supplier must indicate on the label whether the substance is a specific isomer or a mixture of isomers. \*

The full meaning of the hazard statements is given in Section 16 of the safety data sheet.

#### **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

General tips: Refer to section 11 of the safety data sheet.

Measures after inhalation: If breathing is difficult, move or transfer the victim to fresh air and let him rest in a position that allows him to breathe freely. \*

Skin contact: In case of skin contamination, immediately change all contaminated clothes and wash the contaminated skin with plenty of water and soap. Rinse the skin under running water/shower. If skin irritations or rashes occur: Seek medical attention/advice. If skin irritations persist, consult a doctor. \*

Eye contact: Rinse gently with water for a few minutes. Remove contact lenses, if any, and are easy to do. Continue rinsing. Call a doctor immediately. On contact with eyes, rinse immediately with

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plenty of water and seek medical attention. \*

Measures after ingestion: If swallowed: rinse mouth. DO NOT induce vomiting. Call a doctor immediately.\*

#### 4.2. Most significant acute symptoms and effects that occur after a certain period of time

Money can cause drowsiness and dizziness. Repeated exposure can cause the skin to dry out or crack. It can cause eve irritation. \*

### 4.3. Indication of the need for any emergency medical care and special treatment

Symptomatic treatment. \*

#### **SECTION 5: FIRE MEASURES**

#### 5.1. Fire extinguishers

Dust, alcohol-resistant foam, carbon dioxide, water mist. Do not use a strong stream of water. \*

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

In the event of a fire, carbon monoxide and other toxic gases may form. \*

#### 5.3. Tips for firefighters

Do not intervene without proper protective equipment. Independent breathing apparatus. Full protective clothing. \*

#### **SECTION 6: EMERGENCY RELEASE MEASURES**

### 6.1. Personal Protective Equipment, Protective Equipment and Emergency Procedures

For non-emergency personnel:

Remove ignition sources. Ensure adequate ventilation of the room. Avoid direct and indirect\* contact with the released substance. Avoid contact with skin and eyes. Personal protective equipment – Section 8 of the safety data sheet.

For those responsible for emergencies:

Do not intervene without proper protective equipment. See section 8. \*

# 6.2. Environmental precautions

Avoid discharge into the environment. Do not allow it to enter surface water or sewers. Do not allow the product to get into groundwater, water bodies or sewers, even in small quantities. \*

# 6.3. Methods and materials for restraint and cleaning

Cover the spilled/spilled product with non-flammable material, such as sand, soil, vermiculite. Assemble the product mechanically. \*

#### 6.4. Reference to other sections

Personal protective equipment – see section 8 of the safety data sheet. Waste disposal – see section 13 of the safety data sheet.

### **SECTION 7: OPERATION AND STORAGE**

#### 7.1. Safe Operation Precautions

Precautions for safe handling\*:

Ensure good ventilation in the workplace. Keep away from heat, hot surfaces, sparks, open flames, and other sources of ignition. Don't smoke. Use only outdoors or in a well-ventilated area. Wear personal protective equipment.

Hygiene recommendations\*:

Wash contaminated clothes before reuse. Do not take contaminated protective clothing outside the workplace. Do not eat, drink or smoke while using the product. Wash your hands after each contact with the product.

# 7.2. Safe storage conditions, including incompatibilities

Technical measures\*:

Ground/connect the container and receiving equipment.

Storage conditions\*:

Store in a well-ventilated place. Store in a cool place. Keep the container tightly closed.

# 7.3. Specific end-use(s)

No further information available.\*

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### SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

### 8.1. Control parameters

National occupational exposure limits and biological limit values\*:

Xylene (1330-20-7)		
EU - Indicative Exposure Limit at Work (IOEL)		
Local name	Xylene, mixed isomers, pure	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	442 mg/m³	
IOEL STEL [ppm]	100 ppm	
Zabelezhka	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Poland – Maximum permissible concentration in the workplace		
Local name	Xylene mixture of isomers: 1,2-; 1,3-; 1,4-	
NDS (OEL TWA)	100 mg/m	
NDSCh (OEL STEL)	200 mg/m³	
Regulatory reference	Official Gazette 2018, paragraph 1286	
Butyl alcohol (71-36-3)		
Poland – Maximum permissible concentration in the workplace		
Local name	Butane-1-ol (n-butyl alcohol)	
NDS (OEL TWA)	50 mg/m	
NDSCh (OEL STEL)	150 mg/m³	
Regulatory reference	Official Gazette 2018, paragraph 1286	

#### Monitoring method\*:

Monitoring in accordance with the Ordinance of the Minister of Health of 2 February 2011 on the testing and measurement of factors harmful to health in the working environment, State Gazette 2011 No 33, item 166.

PN-EN 482:2012 Exposure to chemical agents at work – General requirements for characterising procedures for measuring chemical

Formation of air pollutants\*: No further data available.

DNEL и PNEC*:		
Xylene (1330-20-7)		
DNEL/DMEL (Workers)		
Acute - systemic effects after inhalation	289 mg/m³	
Acute - local effects after inhalation	289 mg/m³	
Long-term – systemic effects on skin contact	180 mg/kg body weight/day	
Long-term - systemic effects after inhalation	77 mg/m	
DNEL/DMEL (total population)		
Acute systemic effects after inhalation	174 mg/m	
Acute - local effects after inhalation	174 mg/m	
Long-term - systemic effects after ingestion	1.6 mg/kg body weight/day	
Long-term - systemic effects after inhalation	14,8 mg/m	
Long-term - systemic effects on skin contact	108 mg/kg body weight/day	
PNEC (Water)		
PNEC aqua (fresh water)	0.327 mg/l	
PNEC aqua (sea water)	0.327 mg/l	

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PNEC aqua (intermittent, fresh water)	0.327 mg/l
PNEC (sediment)	0.327 mg/l
PNEC Sediment (Fresh Water)	12.46 mg/kg dry weight
PNEC sediment (salt water)	12.46 mg/kg dry weight
PNEC (soil)	12.40 mg/kg dry weight
PNEC (SOII)	2.31 mg/kg dry weight
	2.31 mg/kg dry weight
PNEC (Wastewater Treatment Plant)	C 50 mg//
PNEC Treatment Plant	6.58 mg/l
Polyamide (68082-29-1)	
DNEL/DMEL (workers)	T
Long-term – systemic effects, skin contact	1.1 mg/kg body weight/day
Long-term – systemic effects after inhalation	3,9 mg/m
DNEL/DMEL (total population)	
Long-term – systemic effects after ingestion	0.56 mg/kg body weight/day
Long-term - systemic effects after inhalation	0,97 mg/m
Long-term - systemic effects after skin contact	0.56 mg/kg body weight/day
PNEC (Water)	
PNEC aqua (fresh water)	0.00434 mg/l
PNEC aqua (sea water)	0.000434 mg/l
PNEC aqua (intermittent, fresh water)	0.0434 mg/l
PNEC (sediment)	
PNEC Sediment (Fresh Water)	434.02 mg/kg dry weight
PNEC sediment (salt water)	43.4 mg/kg dry weight
PNEC (soil)	
PNEC Soil	86.78 mg/kg dry weight
PNEC (Wastewater Treatment Plant)	
PNEC Treatment Plant	3.84 mg/l
butyl alcohol (71-36-3)	
DNEL/DMEL (workers)	
Long-term - local effects after inhalation	310 mg/m
DNEL/DMEL (total population)	
Long-term - systemic effects after ingestion	3.125 mg/kg body weight/day
Long-term - local effects after inhalation	55 mg/m
PNEC (Water)	
PNEC aqua (fresh water)	0.082 mg/l
PNEC aqua (sea water)	0.0082 mg/l
PNEC aqua (intermittent, fresh water)	2.25 mg/l
PNEC (sediment)	
PNEC Sediment (Fresh Water)	0.178 mg/kg dry weight
PNEC sediment (salt water)	0.0178 mg/kg dry weight
PNEC (soil)	
PNEC Soil	0.015 mg/kg dry weight
PNEC (Wastewater Treatment Plant)	1
PNEC Treatment Plant	2476 mg/l
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LFOXI FRIFIER HARDENER 1.1			
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			
DNEL/DMEL (Workers)			
Acute - systemic effects, skin contact	0.6 mg/kg body weight/day		
Acute - systemic effects, after inhalation	2,1 mg/m		
Long-term - systemic effects, skin contact	0.15 mg/kg body weight/day		
Long-term - systemic effects after inhalation	0,53 mg/m		
DNEL/DMEL (total population)			
Acute - systemic effects, skin contact	0.075 mg/kg body weight/day		
Acute systemic effects after inhalation	0,13 mg/m		
Long-term - systemic effects, after ingestion	0.075 mg/kg body weight/day		
Long-term - systemic effects after inhalation	0,13 mg/m		
Long-term - systemic effects on skin contact	0.075 mg/kg body weight/day		
PNEC (Water)			
PNEC aqua (fresh water)	0.046 mg/l		
PNEC aqua (sea water)	0.0046 mg/l		
PNEC aqua (intermittent, fresh water)	0.46 mg/l		
PNEC aqua (periodic, sea water)	0.046 mg/l		
PNEC (sediments)			
PNEC Sediments (Fresh Water)	0.2621 mg/kg dry weight		
PNEC sediments (seawater)	0.026211 mg/kg dry weight		
PNEC (soil)			
PNEC Soil	0.0254 mg/kg dry weight		
PNEC (Wastewater Treatment Plant)			
PNEC Treatment Plant	0.2 mg/l		
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)			
PNEC (Water)			
PNEC water (freshwater)	0.062 mg/l		
PNEC aqua (sea water)	0.0062 mg/l		
PNEC aqua (intermittent, fresh water)	0.62 mg/l		
PNEC (sediment)			
PNEC Sediments (Fresh Water)	0.22 mg/kg dry weight		
PNEC sediments (salt water)	0.022 mg/kg dry weight		
PNEC (soil)			
PNEC Soil	0.0085 mg/kg dry weight		
PNEC (Wastewater Treatment Plant)			
PNEC Treatment Plant	25 mg/l		

Risk area management\*: No further information.

# 8.2. Exposure control

Appropriate engineering control\*: Ensure good ventilation in the workplace. Personal

protective equipment symbols\*:

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Eye protection:

Tight-fitting safety glasses.

Skin and body protection:

Appropriate protective clothing (covered, impregnated fabrics).

Hand protection:

Protective gloves PN-EN 374-3 (Viton, thickness0.7 mm, penetration time >480 min.; nitrile rubber, thickness0.4 mm, penetration time >30 min.).

Airway protection:

Gas mask with filter type A1/B1 (EN 14387).\*

Environmental Exposure Control:

Avoid discharge into the environment.\*

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

State of Aggregation Colour light yellow Smell sharp, piercing Odor threshold 0.9-9 mg/m<sup>3</sup> (xylene) Melting point Not applicable\* Freezing point not available\* 117143°C Boiling point Flammability (solid, gaseous) Not applicable Explosive properties\* no data

Lower and upper explosive limitsLower: 1,1 % by volume, top: 8,0 % by volume (xylene) Flash point25 °C

Self-ignition temperature 340 °C

Decomposition temperature is not specified nH 10

pH

Kinematic viscosity\* not available

Solubility (in water) Weak

N-octanol/water partition coefficient available\* Vapour pressure9 hPa (20°C)

(xylene)

Vapor pressure at 50 °C\* Not available

Density approximately 0.9 g/cm³ (20°C)

Relative density\*Not available Relative vapour density at 20 °C \*Not available Particle characteristics \*

Not

applicable

#### 9.2. Other information

No data available.

# **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

The product is not reactive under normal conditions.

#### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of dangerous reactions

Under normal conditions of use, no dangerous reactions are known. \*

# 10.4. Conditions to be avoided

The product is flammable. Avoid contact with strong oxidizing agents, peroxides, strong acids and alkalis. Avoid the accumulation and accumulation of static electricity. Keep away from sunlight and heat sources.

#### 10.5. Incompatible materials

Avoid contact with large amounts of organic peroxides, strong acids and alkalis, and other strong oxidizing agents.

#### 10.6. Dangerous decay products

During thermal decomposition, carbon monoxide and other toxic gases are formed.

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#### **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on the hazard classes set out in Regulation (EC) No 1272/2008

Acute toxicity (oral): Not classified (based on available data, classification criteria not met).

Acute toxicity (skin): Harmful on contact with the skin. \* Acute

toxicity (by inhalation): Harmful if inhaled. \*

ATE CLP (skin)\*: 1794.774 mg/kg body weight ATE

CLP (powder, mist)\*: 2.5 mg/l / 4h

Xylene (1330-20-7)		
LD50 oral, rat	3523 mg/kg rat	
LD50 dermal, rabbit	12126 mg/kg body weight Animal: rabbit, Sex of the animal: male	
LC50 Inhalation - Rat	27.124 mg/l	
Polyamide (68082-29-1		
LD50 oral, rat	>2000 mg/kg body weight Animal: rat, Sex of the animal: female, Guideline: OECD Guideline 423 (Acute oral toxicity - method for determining the acute toxicity class), Guideline: EU Method B.1 (Acute oral toxicity - method for determining the acute toxicity class)	
LD50, dermal, rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute dermal toxicity), Guideline: EU Method B.3 (Acute toxicity (dermal))	
butyl alcohol (71-36-3)		
LD50 oral, rat	2292 mg/kg Source: ECHA	
LD50 dermal, rabbit	3430 mg/kg Source: ECHA	
2,4,6-tris(dimethylamin	omethyl)phenol (90-72-2)	
LD50 oral, rat	2169 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1916 - 2455	
LD50, dermal, rat	1280 mg/kg	
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
LD50 oral, rat	2400 mg/kg Source: OECD 401, EEC 67/548 1967	
LD50 dermal, rabbit	>2000 mg/kg body weight Animal: rabbit, Guideline: EPA OPPTS 870.1200 (Acute dermal toxicity), Results notes: other:	
LC50 by inhalation – rat	1.49 – 2.44 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity), Guideline: OECD Guideline 403 (Acute inhalation toxicity)	

Skin corrosion/irritation: Causes skin irritation. pH\*: 10  $\,$ 

Polyaminoamide (68082-29-1)		
pH 10,98 °C Temperature: 25 °C Concentration: 1 % by volume		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
рН	11	

Serious eye damage/eye irritation: Causes serious eye damage. pH \*: 10

Polyaminamide (68082-29-1)		
pH 10,98 °C Temperature: 25 °C Concentration: 1 % by volume		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
рН	11	

Sensitization of the respiratory tract or skin: May cause an allergic skin reaction.

Germ cell mutagenicity: The mixture is not classified as mutagenic. There is no data to confirm the hazard class.

Carcinogenicity: The mixture is not classified as carcinogenic. There is no data to confirm the hazard class.

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Reproductive toxicity: The mixture is not classified as toxic to reproduction. There is no data to confirm the hazard class. STW (Specific Organ Toxicity) – Single exposure: There are no data to confirm the hazard class.

Butyl alcohol (71-36-3)	
WTO (Specific Organ Toxicity) – Single Exposure	It can cause drowsiness or dizziness. It can cause irritation of the respiratory tract.

STO (Specific Organ Toxicity) - Repeated Exposure: There are no data to confirm the hazard class.

Xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg body weight Animal: rat, Sex of the animal: male, Guideline: OECD Guideline 408 (Repeated dose 90-day oral toxicity in rodents), Guideline: EPA OPP 82-1 (90-day oral toxicity)
Polyaminamide (68082-29-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Multiple-Dose Toxicity Study with Reproductive/Developmental Toxicity Screening Test)
Butyl alcohol (71-36-3)	
LOAEL (oral, rat, 90 days)	500 mg/kg body weight Animal: rat
NOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat
2,4,6-tris(dimethylaminomethyl)ph	enol (90-72-2)
NOAEL (oral, rat, 90 days)	15 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Study of oral toxicity in rodents at repeated doses for 90 days), Guideline: EU Method B.26 (Subchronic oral toxicity test: Study of oral toxicity in rodents at repeated doses for 90 days), Remarks on results: other:
N-(3-(trimethoxysilyl)propyl)ethyle	enediamine (1760-24-3)
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Multi-Dose Toxicity Study with Reproductive/Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 1545 mg/kg body weight Animal: rat

Inhalation hazard: There is no data to confirm the hazard class.

Butyl alcohol (71-36-3)		
Viscosity, kinematic 3,641 mm²/s		
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
Viscosity, kinematic	3,1 mm²/s Temperature: "20 °C" Parameter: "kinematic viscosity (in mm²/s)"	

# 11.2. Information on other hazards\*

No further information.

### **SECTION 12: ENVIRONMENTAL INFORMATION**

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)\*: Not classified (Based on the available data, the classification criteria are not met).

Hazardous to the aquatic environment, long-term (chronic)\*: Toxic to aquatic organisms, with a long-lasting effect. It does not break down easily\*.

Xylene (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (former name: Salmo gairdneri)
EC50 - Crustaceans [1]	> 3.4 mg/l Organisms (species) tested: Ceriodaphnia dubia
NOEC for Chronic Toxicity to Fish	> 1,3 mg/l Test organisms (species): Oncorhynchus mykiss (former name: Salmo gairdneri) Duration: "56 d"

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Polyamide (68082-29-1)	
LC50 - Pisces [1]	7,07 mg/l Test organisms (species): Danio rerio (former name: Brachydanio rerio)
EC50 - Crustaceans [1]	7.07 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4.34 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишни наименования: Raphidocelis subcapitata, Selenastrum capricornutum)
Butyl alcohol (71-36-3)	·
LC50 - Pisces [1]	1376 mg/l Source: ECHA
EC50 - Crustaceans [1]	1983 mg/l Source: ECHA
EC50 96h - Algae [1]	225 mg/l Source: ECHA
NOEC (chronic)	4.1 mg/l Test organisms (species): Daphnia magna Duration: "21 days"
2,4,6-tris(dimethylaminomethyl)phenol (90-72	-2)
LC50 - Pisces [1]	> 100 mg/l Organisms tested (species): Cyprinus carpio
EC50 - Crustaceans [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	46.7 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишни наименования: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	25.5 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишни наименования: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	34,812 mg/l Source: ECOSAR
N-(3-(trimethoxysilyl)propyl)ethylenediamine (	(1760-24-3)
LC50 - Pisces [1]	597 mg/l Test organisms (species): Danio rerio (former name: Brachydanio rerio)
EC50 - Crustaceans [1]	81 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	126 mg/l Test organisms (species): Desmodesmus subspicatus (former nam Scenedesmus subspicatus)
EC50 72h - Algae [2]	352 mg/l Test organisms (species): Desmodesmus subspicatus (former nam Scenedesmus subspicatus)
ErC50 algae	8.8 mg/l Source: OECD Guideline 201, SIDS

# 12.2. Stability and degradability

No data available.

# 12.3. Bioaccumulative capacity

butyl alcohol (71-36-3)		
N-octanol/water partition coefficient (Log Pow)  0.9 Source: HSDB		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
N-octanol/water partition coefficient (Log Pow) 0,77		
N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3)		
N-octanol/water partition coefficient (Log Pow) -1,67		

# 12.4. Soil Transferability

No further information available.\*

# 12.5. PBT and vPvB Evaluation Results

No data available.

# 12.6. Endocrine disrupting properties \*

No further information.

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### **EPOXY PRIMER HARDENER 1:1**

#### 12.7. Other adverse effects

No data available.

#### **SECTION 13: WASTE DISPOSAL**

#### 13.1. Waste treatment methods

Local regulations (waste): Dispose of in accordance with applicable regulations.

Waste disposal methods\*: Dispose of the contents/container in accordance with the recommendations of an authorized waste sorting and collection center.

Wastewater disposal recommendations\*: Do not dispose of in the sewer.

Recommendations for disposal of the product/packaging \*: Dispose of the product and packaging as hazardous waste. Do not dispose of with household waste. After cleaning, recycle or dispose of in an authorized facility.

Additional information\*: Flammable vapors may accumulate in the container.

European Waste Catalogue (LoW) code:

08 01 11 - waste paints and varnishes containing organic solvents or other hazardous substances

15 01 10 - Packaging containing residues of hazardous substances or contaminated with hazardous substances (e.g. plant protection products from toxicity class I and II - very toxic and toxic)

#### **SECTION 14: TRANSPORT INFORMATION**

ADR	IMDG	IATA	
14.1. UN List Number or Identification Number	14.1. UN List Number or Identification Number		
United Nations 1866	United Nations 1866	United Nations 1866	
14.2. Exact name of the UN-listed consignment			
RESIN SOLUTION	RESIN SOLUTION *	Resin, solution *	
Description of the transport document*:			
UN 1866 RESIN SOLUTION, 3, III, (D/E), HAZARDOUS TO THE ENVIRONMENT	UN 1866 RESIN SOLUTION, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS (25°C c.c.)	UN 1866 RESIN SOLUTION, 3, III, ENVIRONMENTALLY HAZARDOUS	
14.3. Transport hazard class(s)			
3	3	3	
3	3	3	
14.4. Packing group			
ш	ш	ш	
14.5. Environmental hazards			
Product hazardous to the environment: No	Product hazardous to the environment: No Marine pollutant: No	Environmentally hazardous product: No	
No further information.			

### 14.6. Special precautions for users Road transport\*:

Classification Code (ADR): F1
Limited Quantities (ADR): 5 L
Special Packaging Provisions (ADR): P P1 Combined
Packaging Provisions (ADR): MP19 Transport Category
(ADR): 3
Orange Signs:

EU format in accordance with Commission Regulation (EU) 2020/878

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Tunnel Restriction Code (ADR):

Sea transport\*:

Special provisions (IMDG): 223, 955

Limited quantities (IMDG): 5 L Special provisions for

packaging (IMDG): PP1 EmS No (fire):

F-F EmS No. (Spill): S-E

Load Load Category (IMDG): A

Air transport\*:

No data available.

14.7. Maritime transport of cargo in bulk according to instruments of the International Maritime Organization

Not applicable.

### **SECTION 15: INFORMATION ON THE REGULATORY FRAMEWORK**

#### 15.1. Substance or mixture-specific safety, health and environmental legislation/legislation

Annex XVII to the REACH Regulation (restriction conditions)\*: Does not contain substances listed in Annex XVII to the REACH Regulation (restriction conditions).

Annex XIV to REACH (Authorisation List)\*: Does not contain substances listed in Annex XIV to the REACH Regulation (Authorisation List). List of substances applying for inclusion in REACH (SVHC)\*: Does not contain substances listed in the list of substances applying for inclusion in REACH.

PIC Regulation (EU 649/2012, prior informed consent)\*: Does not contain substances listed PIC (Regulation (EU) No 649/2012 on the export and import of hazardous chemicals).

POP Regulation (EU 2019/1021, persistent organic pollutants)\*: Does not contain substances included in the POP list (Regulation (EU) 2019/1021 on persistent organic pollutants).

Ozone Layer Regulation (EU 1005/2009)\*: Does not contain substances listed for the ozone layer (Regulation (EC) No 1005/2009 on substances that deplete the ozone layer).

Explosives Precursors Regulation (EU 2019/1148)\*: Does not contain substances included in the list of explosives precursors (Regulation (EU) 2019/1148 concerning the placing on the market and use of explosives precursors).

Drug Precursors Regulation (EC 273/2004)\*: Does not contain substances included in the list of drug precursors (Regulation (EC) No 273/2004 on the manufacture and placing on the market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances).

#### Other laws:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH), establishing a 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 Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006 (OJ EU L 353 of 31 December 2008); OJ EU L 235 of 5 September 2009, OJ EU L 83 of 30 March 2011, OJ EU L 179 of 11 July 2012, OJ EU L 149 of 1 June 2013, OJ EU L 261 of 3 October 2013, OJ EU L 167 of 6 June 2014, OJ EU L 197 of 25 July 2015.
- ADR agreement
- Official Journal of the European Union L 136 of 29 May 2007, OJ EU L 304 of 22 November 2007, OJ EU L 268 of 9 October 2008, OJ EU L 46 of 17 February 2009, OJ EU L 164 of 26 June 2009, OJ EU L 133/1 of 31 May 2010, as amended.
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), OJ EU L 132 of 29 May 2015.

# 15.2. Safety assessment of the chemical or mixture

It has not been performed.

#### **SECTION 16: FRIEND INFORMATION**

The classification was carried out by a method of calculation in accordance with the classification rules contained in Regulation No 1272/2008/EC.

Abbreviations and acronyms:	
DNA	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

EU format in accordance with Commission Regulation (EU) 2020/878

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### **EPOXY PRIMER HARDENER 1:1**

Expected acute toxicity  BCF Factor on BCF bioconcentration  BLV Quantitative limit value  BCD Biochemical oxygen consumption (BOD)  CDC Chemical Oxygen Consumption (BOD)  MEL Derived level causing minimal effects  DNEL Derived level without effect  Number on European Community number  ECSO Average effective concentration  IN European standard  TARC International Agency for Research on Cancer  IATA International Air Transport Association  IMDG International Maritime Dangerous Goods Organization  IMDG International Maritime Dangerous Goods Organization  ILCSO Concentration of a substance causing death in 50% of the test population  ILDSO The dose that causes death in 50% of the test population  ILDSO The dose that causes death in 50% of the test population  ILDSO Concentration at which no adverse effects are observed  NOAEC Concentration at which no adverse effects are observed  NOAEC Concentration of Economic Co-operation and Development  OUCC Organisation for Economic Co-operation and Development  OUCC Organisation for Economic Co-operation and Development  OUCC Suppose of the internation at which no adverse effects are observed  PREC Suspected concentration with no effect  RID Rules for the internation in transport of dangerous goods by rail  Sets Sets Oats Sheet  STP Wastewater Treatment Plant  THOO Theoretical Oxygen Consumption (TOD)  TLM Average tolerance limit  Volvelle organic compounds  CAS number CAS number  CAS number CAS number  CAS number CAS number  NO.S. Not stated otherwise			
BLV Quantitative limit value  BLV Quantitative limit value  BOD Biochemical oxygen consumption (BOD)  CDD Chemical oxygen consumption (COD)  DMEL Derived level causing minimal effects  DNEL Derived level evaluing  DNEL Derived level evaluing  DNE	ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
BLV Quantitative limit value  BOD Biochemical oxygen consumption (BOD)  COD Chemical Oxygen Consumption (COD)  DMEL Derived level causing minimal effects  Derivative level without effect  Number on European Community number  Buropean Standard  IARC International Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Ari Transport Association  IMDG International Ari Transport Association  IMDG International Ari Transport Association  IASC Concentration of a substance causing death in 50% of the test population  IASC International Ari Transport Association  IASC International Ari Transport Association  IASC Internation at which horal Ari Transport Association  IASC International Aritimation and Sociation Aritimation A	ATE	Expected acute toxicity	
Biochemical oxygen consumption (BDD)  COD Chemical Oxygen Consumption (COD)  DMEL Derived level causing minimal effects  Number on European Community number the Hu European Community number the Hu European Standard  Immational Agency for Research on Cancer  IATA International Agency for Research on Cancer  IATA International Air Transport Association  IMDG Internation of a substance causing death in 50% of the test population  IMDG Concentration of a substance effects are observed  NOAEC Concentration at which no adverse effects are observed  NOAEC The highest concentration at which no adverse effects are observed  OECD Organisation for Economic Co-operation and Development  OIL Occupational exposure limit value  PREC Suspected concentration with no effect  RID Rules for the international transport of dangerous goods by rail  SDS Safety Data Sheet  STP Wastewater Treatment Plant  THOD Theoretical Oxygen Consumption (TOD)  TLIM Average tolerance limit  VOC Valiatic organic compounds  CAS number CAS number  N.O.S. Not stated otherwise  VPVB Very resistant and very bloaccumulative	BCF	Factor on BCF bioconcentration	
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PBT Persistent, bioaccumulative and toxic substance  PNEC Suspected concentration with no effect  RID Rules for the international transport of dangerous goods by rail  SDS Safety Data Sheet  STP Wastewater Treatment Plant  ThOD Theoretical Oxygen Consumption (TOD)  TLM Average tolerance limit  VOC Volatile organic compounds  CAS number  N.O.S. Not stated otherwise  VPVB Very resistant and very bioaccumulative	OECD	Organisation for Economic Co-operation and Development	
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RID Rules for the international transport of dangerous goods by rail  SDS Safety Data Sheet  STP Wastewater Treatment Plant  ThOD Theoretical Oxygen Consumption (TOD)  TLM Average tolerance limit  VOC Volatile organic compounds  CAS number  N.O.S. Not stated otherwise  VPVB Very resistant and very bioaccumulative	PBT	Persistent, bioaccumulative and toxic substance	
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TLM Average tolerance limit  VOC Volatile organic compounds  CAS number  N.O.S. Not stated otherwise  VPVB Very resistant and very bioaccumulative	STP	Wastewater Treatment Plant	
VOC Volatile organic compounds  CAS number CAS number  N.O.S. Not stated otherwise  vPvB Very resistant and very bioaccumulative	ThOD	Theoretical Oxygen Consumption (TOD)	
CAS number  N.O.S. Not stated otherwise  vPvB Very resistant and very bioaccumulative	TLM	Average tolerance limit	
N.O.S. Not stated otherwise  VPVB Very resistant and very bioaccumulative	VOC	Volatile organic compounds	
vPvB Very resistant and very bioaccumulative	CAS number	CAS number	
· · · · · · · · · · · · · · · · · · ·	N.O.S.	Not stated otherwise	
AND Endocrine-disrupting properties	vPvB	Very resistant and very bioaccumulative	
	AND	Endocrine-disrupting properties	

Other data sources:

ECHA European Chemicals Agency TOXNET

Toxicological Data Network

Full text of H and EUH statements:		
Acute Tox. 4 (oral)	Acute toxicity (oral), category 4	
Acute Tox. 4 (each)	Acute toxicity (skin contact), category 4	
Acute Tox. 4 (inhalation)	Acute toxicity (exposure by inhalation), category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – acute danger, category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – chronic hazard, category 1	

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### **EPOXY PRIMER HARDENER 1:1**

Full text of H and	Full text of H and EUH statements:		
Eye Dam. 1	Serious eye damage/eye irritation, category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, category 2		
Flam. Liq. 3	Current Burns, Category 3		
H226	Flammable liquids and vapors.		
H302	Harmful if swallowed.		
H312	Harmful in contact with the skin.		
H315	It causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	It causes serious eye damage.		
H319	It causes serious eye irritation.		
H332	Harmful by inhalation.		
H335	It can cause irritation of the respiratory tract.		
H336	It can cause drowsiness or dizziness.		
H400	Highly toxic to aquatic organisms.		
H410	Highly toxic to aquatic organisms, with a long-lasting effect.		
H411	Toxic to aquatic organisms, with a long-lasting effect.		
Skin Irrit. 2	Skin corrosiveness/irritation, category 2		
Skin Sens. 1	Skin sensitization, category 1		
STOT SE 3	Specific organ toxicity – single exposure, category 3, narcotic effect		

Classification and procedure used to determine the classification of mixtures in accordance with Regulation (EC) No 1272/2008 [CLP]:			
Flam. Liq. 3	H226	Based on test results	
Acute Tox. 4 (кожа)	H312	Calculation method	
Acute Tox. 4 (Inhalation: dust, mist)	H332	Calculation method	
Skin Irrit. 2	H315	Calculation method	
Eye Dam. 1	H318	Calculation method	
Skin Sens. 1	H317	Calculation method	
Aquatic Chronic 2	H411	Calculation method	

Changes to the data sheet compared to the previous version:

Updates in the section:

- 11: Change in the wording of the title of subsection 11.1: Information on hazard classes defined in Regulation (EC) No 1272/2008
- 12: new subsection 12.6: Endocrine disrupting properties.
- 14: Amendment of the wording of Subsection 14.7: Maritime transport of goods in bulk according to instruments of the International Maritime Organisation.

Changes in the content of points:

1.1, 2.1, 2.2, 2.3, 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 8.1, 8.2, 9.1, 10.3, 11.1, 11.2, 12.1, 12.3, 12.4, 12.6, 13.1, 14.2, 14.3, 14.6, 14.7, 15.1, 16.

General update.

Safety Data Sheet Number: 09-0P1L-0123-V6