

**3:1 EPOXY PRIMER HARDENER**

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

**1.1. Product ID EPOXY PRIMER  
HARDENER 3:1 UFI: 92V0-D0CW-J007-  
6R9U**

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

Hardener, second component for epoxy primers. Professional use in industry.

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

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**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**

Classification according to Regulation (EC) No 1272/2008: The mixture is classified as  
Dangerous. Flam. Liq. 3 Flammable liquids, cat. 3; H226 Flammable liquid and vapors.  
Skin Irrit. 2 Corrosion/irritation of the skin, cat. 2; H315 Causes skin irritation.  
Eye Dam. 1. Serious eye damage/eye irritation, cat. 1; H318 Causes serious damage to the Eyes. Skin. Sens. 1 Skin  
sensitization, cat. 1; H317 May cause an allergic skin reaction. \*  
STOT SE 3 STOT (specific toxicity to certain organs) — single exposure, cat. 3, irritation of the respiratory tract; H335 May cause irritation  
of the respiratory tract.  
STOT RE 2 STOT (specific toxicity to certain organs) — repeated exposure, cat. 2; H373 May cause organ damage from prolonged or  
repeated exposure.  
Aquatic Chronic 3 Hazardous to the aquatic environment – chronic hazard, cat. 3; H412 Harmful to aquatic organisms, with a long-lasting  
effect.

**2.2. Elements of the label**

Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled in accordance with the CLP Regulations.

Pictograms indicating the type of hazard



GHS02 GHS05 GHS07 GHS08 \*  
Signal word: **Danger**.

Contains:

Fatty acids, C18-unsaturated, dimers, a polymer with a high content of oleic fatty acids and triethylene tetrahydroxy; Xylene; butane-1-ol.\*

Hazard Warnings\*:

H226 Flammable liquid and vapors.  
H315 It causes skin irritation.  
H317 May cause allergic skin reaction.\* H318 It  
causes serious eye damage.  
H335 May cause respiratory irritation.\*  
H373 May cause organ damage with prolonged or repeated exposure. H412  
organisms, with a long-lasting effect.

Harmful to aquatic

Safety recommendations\*: Prevention:

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- P210 Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Smoking is prohibited.  
P260 Do not inhale fumes/aerosols.  
P273 Avoid discharge into the environment.\*  
P280 Use protective gloves/protective clothing/safety goggles/protective face mask.

Reaction:  
P305+P351+P338+P310\* IN CONTACT WITH EYES: Rinse gently with water for several minutes. Remove contact lenses, if any, and as far as possible. Continue rinsing immediately. Call the TOXICOLOGY CENTER /to a doctor/. \*.  
P314 If you are unwell, seek medical advice/help.\*

Disposal:  
P501 Dispose of the contents/container in: landfills for hazardous waste.

2.3. Other hazards  
No data available.

SECTION 3: COMPOSITION/INGREDIENT INFORMATION

3.1. Substances  
Not applicable.

3.2. Mixture  
Description: Mixture of organic matter and excipients\*.

| Name of the substance                                                                                  | Concentration | CASE       | EC        | Index        | Registration number   | Hazard class                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------|---------------|------------|-----------|--------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fatty acids, C18-unsaturated, dimers, polymer high in oleic fatty acids and triethylene tetrahydroxy * | 45 – 55       | 68082-29-1 |           |              | -                     | Skin Irrit. 2, H315, Eye Dam. 1, H318, Skin Sens. 1, H317, Aquatic Chronic 3, H412                                                                             |
| Xylene                                                                                                 | 30-40*        | 1330-20-7  | 215-535-7 | 601-022-00-9 | 01-2119488216-32-xxxx | Flam. Liq. 3 H226<br>Acute Tox. 4 H312<br>Acute Tox. 4 H332<br>Skin Irrit. 2 H315<br>Eye Irrit. 2 H319<br>STOT SE 3 H335<br>STOT RE 2 H373<br>Asp. Tox. 1 H304 |
| Butane-1-ol                                                                                            | < 10 *        | 71-36-3    | 200-751-6 | 603-004-00-6 | 01-2119484630-38-xxxx | Flame. Liq. 3 H226<br>Acute Tox. 4 H302<br>Skin Irritant. 2 H315<br>Eye Dam.1 H318<br>STOT SE 3 H335<br>STOT RE 2 H373<br>Asp. Tox. 1 H304                     |
| Etilbenzen*                                                                                            | < 8           | 100-41-4   | 202-849-4 | 601-023-00-4 | -                     | Flam. Liq. 2 H225<br>Acute Tox. 4 H332<br>STOT RE 2 H373<br>Asp. Tox. 1 H304                                                                                   |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine*                                                          | < 1           | 1760-24-3  | 217-164-6 | -            | 01-2119970215-39-xxxx | Skin Sens. 1B H317<br>Eye Dam. 1 H318                                                                                                                          |
| Amines, polyethylene poly-, triethylenetetramine fraction*                                             | < 0.6         | 90640-67-8 | 292-588   | -            | -                     | Acute Tox.4 H302<br>Acute Tox.4 H312<br>Skin Corr.1B H314<br>Skin Sens.1 H317<br>Eye Dam.1 H318<br>Aquatic Chronic3 H412                                       |

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Modes of exposure: Respiratory tract, digestive tract, skin contact, eye contact.

On inhalation: Remove the victim from the exposure area and provide fresh air. If breathing has stopped, apply artificial respiration. If breathing is difficult, seek medical attention.

If swallowed/aspirated: Rinse mouth with water. Give the affected person plenty of water to drink. Do not give anything for drinking to an unconscious person. Do not induce vomiting. When vomiting, keep the head low so that vomit does not get into the lungs. Seek medical attention if necessary.\*

Eye contact: Remove contact lenses. Rinse thoroughly with water, keeping the eyelid open, avoid strong jets of water. Seek ophthalmological care if necessary.\*

In case of skin contact: Remove contaminated clothing and shoes. Wash the skin with plenty of water and soap. If skin irritations occur, seek medical attention.\*

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

High doses of vapor can cause: dizziness, drowsiness, headache, loss of consciousness. Skin contact may cause sensitization, dryness, and cracking.\*

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

Symptomatic treatment. Provide the doctor with the product safety data sheet.

SECTION 5: FIRE MEASURES

5.1. Fire extinguishers

Suitable fire extinguishing agents: Carbon dioxide CO2 , dry powder, alcohol-resistant foam. In case of large fires , use pressurized water\*.

Unsuitable fire extinguishing agents: Do not use concentrated water jets on the surface of the combustible mixture. This leads to the dispersion of the burning mixture and the spread of the fire.

5.2. Particular hazards arising from the substance or mixture

Flammable liquid and vapors.

Combustion products:

In the event of a fire, carbon monoxide, carbon dioxide, nitrogen oxides and other toxic gases are released. In the event of a fire and/or explosion, do not inhale smoke. \*

5.3. Tips for firefighters

Use an autonomous breathing apparatus and full protective clothing. Cool tanks exposed to high temperatures with water from a safe distance, if possible, move them away from the danger area. Do not allow fire water to enter surface or groundwater. \*

SECTION 6: EMERGENCY RELEASE MEASURES

6.1. Personal Protective Equipment, Protective Equipment and Emergency Procedures

Remove ignition sources. Evacuate staff to a safe place. Avoid inhaling vapors/mist/aerosol. Ensure adequate ventilation. Avoid contamination of eyes, skin and clothing. Use protective clothing and equipment.

6.2. Environmental precautions

Prevent environmental pollution. Seal sewer openings. In case of serious contamination of a water body, sewerage system or soil, notify the relevant administrative and control authorities and emergency services.

6.3. Methods and materials for restraint and cleaning

Remove the source of the leak. Collect small spills with non-flammable absorbent material. Collect large spills mechanically. Collect the contaminated soil.

6.4. Reference to other sections

Personal protection: see section 8 of the safety data sheet. Disposal methods: see section 13 of the safety data sheet.

SECTION 7: OPERATION AND STORAGE

7.1. Safe Operation Precautions

Avoid open flames and high temperatures. Work in well-ventilated areas. Do not inhale vapors or spray. Avoid contamination of eyes, skin and clothing. Do not eat or drink at the place of use. Wash your hands before each break and after finishing work. Follow the rules of personal hygiene.

7.2. Safe storage conditions, including incompatibilities

Store in tightly closed original containers. Store in a well-ventilated place. Keep away from oxidizing agents, ignition sources, and heat. Prevent electrostatic discharges.\*

7.3. Specific end-use(s)

No additional data available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

8.1. Control parameters Maximum

permissible concentrations:

| Substance | CASE | NDS (mg/m³) | NDSCh (mg/m³) | NDSP (mg/m³) | Notes: Labelling<br>of substances bearing the designation 'skin'<br>** |
|-----------|------|-------------|---------------|--------------|------------------------------------------------------------------------|
|-----------|------|-------------|---------------|--------------|------------------------------------------------------------------------|

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|---------------------------|-----------|-----|-----|---|------|
| Xylene*                   | 1330-20-7 | 10  | 20  | - | skin |
| Bhutan-1-ol               | 71-36-3   | 50  | 150 | - | skin |
| Etilbenzen*               | 100-41-4  | 200 | 400 | - | skin |

\*\*Labelling a substance with the designation 'skin' means that the absorption of the substance through the skin can be as significant as exposure by inhalation.

| CAS NUMBER | ABSORBED SUBSTANCE | MARKED SUBSTANCE      | BIOLOGICAL MATERIAL | DSB VALUES          |
|------------|--------------------|-----------------------|---------------------|---------------------|
| 1330-20-7  | Xylene             | Methyl hypopuric acid | Urine**             | 0.75 g/g creatinine |

\*\*Sample is taken once, at the end of daily exposure on any day.

**DNEL value:**

|                                                               |            |           |              |                                       |                            |
|---------------------------------------------------------------|------------|-----------|--------------|---------------------------------------|----------------------------|
| Xylene                                                        | DNEL value | workers   | skin         | Long-term exposure – systemic effects | 212 mg/kg body weight/day  |
|                                                               | DNEL value | workers   | inhalation   | acute exposure – local effects        | 442 mg/m³                  |
|                                                               | DNEL value | workers   | inhalation   | Acute exposure – systemic effects     | 442 mg/m3                  |
|                                                               | DNEL value | workers   | inhalation   | Long-term exposure – local effects    | 221 mg/m3                  |
|                                                               | DNEL value | workers   | inhalation   | Long-term exposure – systemic effects | 221 mg/m³                  |
|                                                               | DNEL value | Consumers | assimilation | Long-term exposure – systemic effects | 12.5 mg/kg body weight/day |
|                                                               | DNEL value | Consumers | skin         | Long-term exposure – systemic effects | 125 mg/kg body weight/day  |
|                                                               | DNEL value | Consumers | inhalation   | acute exposure – local effects        | 260 mg/m³                  |
|                                                               | DNEL value | Consumers | inhalation   | Acute exposure – systemic effects     | 260 mg/m3                  |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – local effects    | 65.3 mg/m³                 |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – systemic effects | 65.3 mg/m³                 |
| butane-1-ol                                                   | DNEL value | workers   | inhalation   | Long-term exposure – systemic effects | 310 mg/m3                  |
|                                                               | DNEL value | workers   | inhalation   | Long-term exposure – local effects    | 310 mg/m3                  |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – systemic effects | 55,357 mg/m3               |
|                                                               | DNEL value | Consumers | assimilation | Long-term exposure – systemic effects | 1,5625 mg/kg               |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – local effects    | 155 mg/m³                  |
|                                                               | DNEL value | Consumers | skin         | Long-term exposure – systemic effects | 3,125 mg/kg                |
| Etilbenzene                                                   | DNEL value | workers   | skin         | Long-term exposure – systemic effects | 180 mg/kg body weight/day  |
|                                                               | DNEL value | workers   | inhalation   | acute exposure – local effects        | 293 mg/m³                  |
|                                                               | DNEL value | workers   | inhalation   | Long-term exposure – systemic effects | 77 mg/m3                   |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – systemic effects | 15 mg/m3                   |
|                                                               | DNEL value | Consumers | assimilation | Long-term exposure – systemic effects | 1.6 mg/kg body weight/day  |
| N-(3-(trimethoxysilyl)propyl ) ethylenediamine                | DNEL value | workers   | inhalation   | Long-term exposure – systemic effects | 35,5 mg/m3                 |
|                                                               | DNEL value | workers   | skin         | Long-term exposure – systemic effects | 5 mg/kg body weight/day    |
|                                                               | DNEL value | Consumers | assimilation | Long-term exposure – systemic effects | 2.5 mg/kg/day              |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – systemic effects | 8,7 mg/m3                  |
|                                                               | DNEL value | Consumers | skin         | Long-term exposure – systemic effects | 2.5 mg/kg/day              |
| amines, polyethylene polyamine fraction, triethylenetetramine | DNEL value | workers   | inhalation   | Long-term exposure – systemic effects | 1 mg/m3                    |
|                                                               | DNEL value | workers   | inhalation   | Acute exposure – systemic effects     | 5380 mg/m3                 |
|                                                               | DNEL value | workers   | skin         | Long-term exposure – systemic effects | 0,57 mg/kg                 |
|                                                               | DNEL value | workers   | skin         | Long-term exposure – local effects    | 0.028 mg/cm2               |
|                                                               | DNEL value | Consumers | inhalation   | Long-term exposure – systemic effects | 0.29 mg/m³                 |
|                                                               | DNEL value | Consumers | inhalation   | Acute exposure – systemic effects     | 5380 mg/m3                 |
|                                                               | DNEL value | Consumers | skin         | Long-term exposure – systemic effects | 0,25 mg/kg /               |
|                                                               | DNEL value | Consumers | skin         | Acute exposure – systemic effects     | 8 mg/kg body weight/day    |
|                                                               | DNEL value | Consumers | skin         | acute exposure – local effects        | 1 mg/cm2                   |

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|  |            |           |              |                                       |                |
|--|------------|-----------|--------------|---------------------------------------|----------------|
|  | DNEL value | Consumers | assimilation | Long-term exposure – systemic effects | 0.41 mg/kg/day |
|  | DNEL value | Consumers | assimilation | Acute exposure – systemic effects     | 20 mg/kg/day   |

PNEC value:

|                                                               |            |                            |                                   |
|---------------------------------------------------------------|------------|----------------------------|-----------------------------------|
| Xylene                                                        | PNEC value | Fresh water                | 0.327 mg/l                        |
|                                                               | PNEC value | sea water                  | 0.327 mg/l                        |
|                                                               | PNEC value | sediment (fresh water)     | 12.46 mg/kg dry sediment weight   |
|                                                               | PNEC value | Sediment (seawater)        | 12.46 mg/kg dry sediment weight   |
|                                                               | PNEC value | Biological Treatment Plant | 6.58 mg/dm³                       |
|                                                               | PNEC value | soil                       | 2.31 mg/kg dry soil weight        |
| butane-1-ol                                                   | PNEC value | Sweet                      | 0.082 mg/l                        |
|                                                               | PNEC value | sea water                  | 0.0082 mg/l                       |
|                                                               | PNEC value | Border Release             | 2.25 mg/l                         |
|                                                               | PNEC value | wastewater treatment plant | 2476 mg/l                         |
|                                                               | PNEC value | Sludge (Fresh Water)       | 0,324 mg/kg                       |
|                                                               | PNEC value | Sediment (seawater)        | 0,0324 mg/kg                      |
| Etilbenzen                                                    | PNEC value | soil                       | 0,0166 mg/kg                      |
|                                                               | PNEC value | Fresh water                | 0.1 mg/l                          |
|                                                               | PNEC value | sea water                  | 0.01 mg/l                         |
|                                                               | PNEC value | sediment (fresh water)     | 13.7 mg/kg dry sediment weight    |
|                                                               | PNEC value | Sediment (seawater)        | 1.37 mg/kg dry weight of sediment |
|                                                               | PNEC value | Biological Treatment Plant | 9.6 mg/dm³                        |
| N-(3-(trimethoxysilyl)propyl)etilediamine                     | PNEC value | soil                       | 2.68 mg/kg dry soil weight        |
|                                                               | PNEC value | Fresh water                | 0.62 mg/l                         |
|                                                               | PNEC value | sea water                  | 0.0062 mg/l                       |
|                                                               | PNEC value | sediment (fresh water)     | 0,05 mg/kg                        |
|                                                               | PNEC value | Sediment (seawater)        | 0,005 mg/kg                       |
|                                                               | PNEC value | Treatment Plant            | 25mg/dm³                          |
| amines, polyethylene polyamine fraction, triethylenetetramine | PNEC value | soil                       | 0,0075 mg/kg                      |
|                                                               | PNEC value | Interrupted Input          | 0.62 mg/l                         |
|                                                               | PNEC value | Fresh water                | 190 µg/l                          |
|                                                               | PNEC value | sea water                  | 38 µg/l                           |
|                                                               | PNEC value | sediment (fresh water)     | 95.5 mg/kg dry weight             |
|                                                               | PNEC value | Sediment (seawater)        | 19.2 mg/kg dry weight             |
|                                                               | PNEC value | wastewater treatment plant | 4.25 mg/dm³                       |
|                                                               | PNEC value | soil                       | 19.1 mg/kg dry weight             |
|                                                               | PNEC value | secondary poisoning        | 0.18 mg/kg dry weight             |
|                                                               | PNEC value | freshwater (periodic)      | 200 µg/l                          |

8.2. Appropriate Engineering

**Control:**  
General and local aspiration ventilation. Explosion-proof electrical installation.

Individual protective measures, such as personal protective equipment:

Eye or face protection:  
Safety goggles/tight-fitting safety goggles.

Hand and skin protection:  
Chemical-resistant butyl rubber gloves (thickness 0.7 mm, penetration time > 480 min). Since the product is a mixture of several substances, the resistance of the materials used to make the gloves cannot be calculated in advance and therefore must be checked before use. Information on the time of penetration of the substance through the gloves must be obtained from the manufacturer of the gloves.  
Protective clothing, footwear, antistatic.\*

Airway protection:  
In the absence of adequate ventilation, a mask with fresh air supply is recommended, and for short-term operation – an A2-P2 combined filter. When cutting, grinding or sandblasting hardened components, dust particles may form and can be inhaled.\*

Environmental Exposure Control:  
Do not allow the product to get into sewers, waterways, or soil.\*

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

|                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| State of Aggregation *                    | liquid                                      |
| Appearance                                | at room temperature is a viscous liquid     |
| Colour                                    | Colourless*                                 |
| Smell                                     | Characteristic*                             |
| Melting/freezing point*                   | no data                                     |
| Boiling point                             | >150°C                                      |
| Flammability of materials                 | flammable liquids and vapors *              |
| Lower and upper explosive limits (% vol.) | lower 1.0 vol. %; Upper 7.1 vol. % (xylene) |

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|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Flame Temperature                    | >24°C *                           |
| Self-ignition temperature            | no data available *               |
| Decomposition temperature            | no data available                 |
| pH                                   | no data                           |
| Kinematic viscosity *                | 90 mm2 /s at 40°C                 |
| Solubility in waterno data available | * N-octanol/water                 |
| partition coefficient, no data       |                                   |
| Vapor pressure/hPa                   | 8–12 hPa at 20 °C(butyl acetate)* |
| Density                              | approximately 0.9 g/cm³           |
| Vapor density relative to air        | no data available*                |
| Particle characteristics *           | no data available                 |

9.2. Other Information  
No additional data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity  
Under normal conditions, the product is not chemically reactive.

10.2. Chemical stability  
Under normal conditions of storage and use, the mixture is chemically stable.

10.3. Possibility of dangerous reactions  
No information available. \*

10.4. Conditions to be avoided  
Avoid exposure to high temperatures and heat sources\*.

10.5. Incompatible materials  
No information available. \*

10.6. Dangerous decay products  
Thermal decomposition leads to the formation of carbon monoxide and other toxic gases.\*

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the hazard classes set out in Regulation (EC) No 1272/2008  
There are no empirical data available on the toxicological properties of this product. The assessment is based on data on the ingredients of the product.

Acute toxicity\*:

|                                                           |                         |                                                       |
|-----------------------------------------------------------|-------------------------|-------------------------------------------------------|
| Xylene                                                    | LD50 (rat, oral)        | > 2000 mg/kg                                          |
|                                                           | LC50 (rat, inhalation)  | > 20 milligrams/cubic decimeter <sup>3</sup> /4 hours |
|                                                           | LD50 (rabbit, leather)  | > 2000 mg/kg                                          |
| butane-1-ol                                               | LD50(rat, female, oral) | 2292 mg/kg                                            |
|                                                           | LC50 (rat, inhale)      | > 17.76 mg/l/4h                                       |
|                                                           | LD50 (rabbit, leather)  | 3430 mg/kg                                            |
| Etilbenzen                                                | LD50 (rat, oral)        | 3500 mg/kg                                            |
|                                                           | LC50 (rat, inhale)      | 17.8 mg/m³/4h                                         |
|                                                           | LD50 (Leather)          | 15 400 mg/kg                                          |
|                                                           | TCL0 (human, inhale)    | 442 mg/m³/8h                                          |
| amines, polyethylene poly-, triethylenetetramine fraction | LD50 (rabbit, leather)  | 1465,4 mg/kg                                          |

ATEmix (oral, skin) > 2000 mg/kg body weight \* ATEmix (inhalation) > 20 mg/l \*  
The ATEmix values have been calculated using the appropriate conversion factor from Table 3.1.2 of Regulation 1272/2008/EC as amended.\*  
The mixture is not classified as acutely toxic. There is no data confirming the danger.

**Skin corrosion/ irritation:** The mixture is classified as irritating to the skin.\*  
**Serious eye damage/eye irritation:** The mixture is classified as causing serious eye damage.\*  
**Sensitization of the respiratory tract or skin:** The mixture is classified as a skin sensitizer. **Germ cell mutagenicity:** The mixture is not classified as germ cell mutagenic. There are no data confirming the hazard.  
**Carcinogenicity \*:** The mixture has not been classified as carcinogenic. There are no data confirming the hazard.  
**Reproductive toxicity\*:** The mixture has not been classified as carcinogenic. There are no data confirming the hazard.  
**DEW (Specific Organ Toxicity) – Single Exposure\*:** The mixture is classified as toxic to certain organs – Single exposure. May cause respiratory irritation.  
**STW (Specific Organ Toxicity) – Repeated Exposure \*:** The mixture is not classified as toxic to certain organs – repeated exposure.  
**Inhalation hazard\*:** The mixture is not classified as hazardous by aspiration. There is no data confirming the hazard.

11.2. Information about other hazards \*

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No data available.

**SECTION 12: ENVIRONMENTAL INFORMATION**

**12.1. Toxicity**

There are no experimentally supported data available on the toxicological properties of this product. The assessment is made on the basis of data on the ingredients of the product.

|                                                            |                                                                        |                    |
|------------------------------------------------------------|------------------------------------------------------------------------|--------------------|
| Xylene                                                     | Acute toxicity to fish (Pimephales promelas)                           | LC50 16.1 mg/l/96h |
|                                                            | acute toxicity to fish (Oncorhynchus mykiss)                           | LC50 2.6 mg/l/96h  |
|                                                            | acute toxicity to aquatic invertebrates (Daphnia magna)                | EC50 3.82 mg/l/48h |
|                                                            | acute algae toxicity                                                   | EC50 2.2 mg/L/73h  |
| butane-1-ol                                                | acute toxicity to fish (Pimephales promelas)                           | LC50 1376 mg/l/96h |
|                                                            | acute toxicity to Daphnia (Daphnia magna)                              | EC50 1328 mg/l/48h |
|                                                            | acute toxicity to microorganisms effect on activated sludge            | EC50 4390 mg/l/17h |
|                                                            | acute toxicity to aquatic plants (growth rate)                         | EC50 225 mg/l/96h  |
|                                                            | long-term toxicity to Daphnia magna                                    | NOEC 4.1 mg/l/21d  |
| Etilbenzene                                                | toxicity to fish (Pimephales promelas)                                 | LC50 49 mg/l/96h   |
|                                                            | acute toxicity to aquatic invertebrates (Daphnia magna)                | EC50 184 mg/l/24h  |
| amines, polyethylene poly-, triethylenetetramin e fraction | Toxicity to fish (Pimephales promelas)                                 | LC50 330 mg/l/96h  |
|                                                            | acute toxicity to aquatic invertebrates (Daphnia magna)                | EC50 31.1 mg/l/48h |
|                                                            | toxicity to algae/aquatic plants (Selenastrum capricornutum)           | ErC50 20 mg/l/72h  |
|                                                            | toxicity to daphnia and other aquatic invertebrates (chronic toxicity) | EC10 1.9 mg/l/21d  |

**12.2. Stability and degradability**

Xylene – biodegradable BCF=25.9\*

Amines, polyethylene polyamine fraction, triethylenetetramine, biodegradation 0%\*

**12.3. Bioaccumulative capacity**

No data available.

**12.4. Soil Transferability**

No data available. \*

**12.5. PBT and vPvB Evaluation Results**

Substances do not meet the criteria for classification as PBT or vPvB.\*

**12.6. Endocrine disrupting properties \***

No data available.

**12.7. Other adverse effects\***

No data available.

**SECTION 13: WASTE DISPOSAL**

**13.1. Waste treatment methods**

Deliver used packaging and waste products to authorized recycling companies. Dispose of in accordance with applicable local and official waste regulations – see section 15 of the safety data sheet.

Waste code:

08 01 11 Waste paints and varnishes containing organic solvents or other hazardous substances.

Packaging waste code:

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

**SECTION 14: TRANSPORT INFORMATION**

|              |                                                  | <b>ADR/RID</b>                                                                       | <b>IMGD</b>                                                                           | <b>IATA</b>                                                                           |
|--------------|--------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>14.1.</b> | <b>UN List Number or Identification Number*</b>  | 1866                                                                                 | 1866                                                                                  | 1866                                                                                  |
| <b>14.2.</b> | <b>Exact name of the shipment on the UN list</b> | RESIN SOLUTION                                                                       |                                                                                       |                                                                                       |
| <b>14.3.</b> | <b>Transport hazard class(s)</b>                 | 3                                                                                    | 3                                                                                     | 3                                                                                     |
|              | <b>Classification code</b>                       | F1                                                                                   | F1                                                                                    | F1                                                                                    |
|              | <b>Warning label No. 3</b>                       |  |  |  |
| <b>14.4.</b> | <b>Packing group</b>                             | III                                                                                  | III                                                                                   | III                                                                                   |
| <b>14.5.</b> | <b>Environmental hazards</b>                     | Not                                                                                  | Not                                                                                   | Not                                                                                   |
| <b>14.6.</b> | <b>Special precautions for consumers</b>         | Not applicable.                                                                      |                                                                                       |                                                                                       |

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|      |                                                                                                          |                 |
|------|----------------------------------------------------------------------------------------------------------|-----------------|
| 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**

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, as amended. \*

**15.2. Safety assessment of the chemical or mixture**

A chemical safety assessment has not been carried out.

**SECTION 16: FRIEND INFORMATION**

Meaning of H-statements in Sections 2 to 15 of the safety data sheet\*:

Flam. Liq. 3Flammable liquids, cat. 3. H226  
 Flammable liquid and  
 vapors. Flam. Liq. 2Flammable liquids, cat. 2.

H225 Highly flammable liquid and  
 money. Acute Tox. 4Acute toxicity, cat. 4.  
 H302 Harmful if swallowed.  
 H312 Harmful in contact with the skin.  
 H332 Harmful by inhalation.  
 Skin Corr 1B Corrosion/irritation of the skin, cat. 1B.  
 H314 Causes severe burns to the skin and serious damage to the Eyes. Skin  
 Irrit. 2Corrosion/irritation of the skin, cat. 2.  
 H315 It causes skin irritation.  
 Eye Dam. 1Serious eye damage/eye irritation, cat. 1. H318 It causes  
 serious eye damage.  
 Eye Irrit. 2Serious eye damage/eye irritation, cat. 2. H319 It causes  
 serious eye irritation.  
 Skin. Sense. 1 Skin sensitization, cat. 1.  
 H317 May cause an allergic skin reaction.  
 STOT SE 3STOT (specific toxicity to certain organs) — single exposure, cat. 3. H335 It can cause  
 irritation of the respiratory tract.  
 H336 It can cause drowsiness or dizziness.  
 STOT RE 3STOT (specific organ toxicity) — repeated exposure cat. 2. H373 May cause organ damage  
 with prolonged or recurrent exposition. Asp. Tox. 1Inhalation hazard, cat. 1.  
 H304 It can be deadly if ingested and entered the respiratory tract. Aquatic Chronic 3  
 Hazardous to the aquatic environment – chronic hazard, cat. 3.  
 H412 Harmful to aquatic organisms, with a long-lasting effect.

Explanation of abbreviations and acronyms used in the CAS Safety Data Sheet Chemical  
 Summary Service.

EC No. assigned to a chemical in the European Inventory List of Existing Chemical Substances (EINECS), in the European List of Notified Chemical Substances (ELINCS) or the number in the list of chemical substances listed in the publication 'Substances that are no longer polymers'.

NDS maximum permissible concentrations of substances harmful to health in the working environment.

NDSch Maximum Permissible Instantaneous Concentration – the maximum permissible instantaneous concentration, defined as an average value that must not adversely affect the health of the worker and the health of future generations if the E is kept in the working environment for no longer than 30 minutes during the work shift. \*

NDSP maximum permissible concentration.

vPvB very resistant substance with very high bioaccumulation capacity PBT  
 persistent, bioaccumulative and toxic substance

DL50 \*lethal dose – the dose at which 50% of the tested animals die within a specified period of time LC50 \*lethal  
 concentration – the concentration at which 50% of the tested animals die within a certain period of time  
 Time period

EC50 \*effective concentration – the effective concentration of a substance causing a reaction at 50 % of the maximum value

DNEL \*level that does not cause adverse effects on human health – level of exposure to a substance that does not cause adverse effects on human health

PNEC \*suspected concentration with no effect – the concentration of a substance below which no harmful effects on the environment are expected

DSB \* acceptable concentration in biological material – the highest acceptable level of an agent or its metabolite in the relevant biological material or the highest acceptable value of the relevant indicator determining the effect of the chemical agent on the organism

BCF \* bioconcentration factor (bioconcentration) – the ratio between the concentration of a substance in an organism

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and its concentration in equilibrium water Status UN

No Identification number of the material (UN number).

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road. RID The rules for the international transport of dangerous goods by rail.

IMDG International Maritime Dangerous Goods Code. IATA The International Air Transport Association. RID

Rules for the International Transport of Dangerous Goods by Rail.

IATA \* International Air Transport Association

Recommended Restrictions of Use:

The product is intended for professional use only.

Training tips:

Read the safety data sheet before use

Other sources of information

IUCLID International Uniform Chemical Information Database ESIS European Chemical Information System ECHA website

Other information

The product described in the safety data sheet must be stored and used in accordance with good industrial practices and in accordance with all legal regulations.

The information and recommendations contained in the safety data sheet are based on our general experience and the latest knowledge and are presented in good faith. No part of this publication shall be construed as a warranty, warranty or position, be it direct, indirect or otherwise. In all cases, it is the responsibility of the user to determine and verify that the information and recommendations are accurate, sufficient and relevant to the specific case. The user is responsible for creating conditions for the safe use of the product and assumes responsibility for the consequences of improper use of this product.

Changes in the technical specification 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: Change in wording of subsection 14.1: United Nations list number or identification number

a change in the wording of subsection 14.7: Maritime transport of cargo in bulk according to instruments of the International Maritime Organization.

Amendments to the content of sections:

1.1, 2.1, 2.2, 2.3, 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.3, 7.1, 7.2, 8.1, 8.2, 9.1, 10.3, 10.4, 10.6, 11.1, 11.2, 12.1, 12.2, 12.4, 12.5, 12.6, 12.7, 13.1, 14.1, 14.7, 15.1, 16.

General update.

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