# SAFETY DATA SHEET

9103 (Activator 9170/9180 High Build Epoxy Primers)

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

### 1.1 Product identifier

**Product name** : 9103 (Activator 9170/9180 High Build Epoxy Primers)

**Product description** : Hardener.

**Product type** : Liquid.

**UFI** : 5800-N0M7-A00V-T9U1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

| Identified uses |
|---|
| Industrial use<br>Professional use |

| Uses advised against | Reason |
|---|---|
| Consumer use | Product is not intended for consumer use. |

### 1.3 Details of the supplier of the safety data sheet

RUST-OLEUM EUROPE
Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium
Telephone no.: +32 (0) 13 460 200
Fax no.: +32 (0) 13 460 201

Tor Coatings Limited
Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom
Telephone no.: +44 (0) 191 4106611
Fax no.: +44 (0) 191 4920125
enquiries@tor-coatings.com

**e-mail address of person responsible for this SDS** : rpmeurohas@rustoleum.eu

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

| | |
|---|---|
| Telephone number Belgium | : Poison centre: +32(0)70 245 245 |
| Telephone number Bulgaria | : +359 2 9154 409 |
| Telephone number Croatia | : +385 1 2348 342 |
| Telephone number Cyprus | : |
| Telephone number Denmark | : Contact the "Giftlinien" on tel. No. 82 12 12 12 (open 24 hours a day). See point 4 on first aid. |
| Telephone number Estonia | : 16662 |
| Telephone number Finland | : 0800 147 111 |
| Telephone number France | : ORFILA (INRS): +33 (0)1 45 42 59 59 (24/7) |
| Telephone number Greece | : Emergency Telephone Poison Center Nos. Children Aglaia Kyriakou +30 210 7793777 |

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

| | | |
|---|---|---|
| Telephone number Hungary | : | Health Toxicology Information Service (ETTSZ)<br>(+ 36-80) 201-199 (in case of emergency 0-24 h, can be called free of charge). |
| Telephone number Iceland | : | |
| Telephone number Ireland | : | 809 2166<br>Available 8am to 10pm 7 days per week |
| Telephone number Italy | : | 800183459 |
| Telephone number Latvia | : | Toxicology and sepsis clinics<br>Poisoning and Drug Information Center,<br>Hipokrāta Street 2, Riga, Latvia, LV-1038,<br>Phone number: +371 67042473 |
| Telephone number Lithuania | : | Poison Information Office 24 hours a day:<br>Phone: +370 (5) 2362052 (www.apsinuodijau.lt/) |
| Telephone number Luxembourg | : | Poison centre: +32(0)70 245 245 |
| Telephone number Netherlands | : | 088-755 8000 |
| Telephone number Norway | : | +47 22 59 13 00 |
| Telephone number Portugal | : | 112<br>24/7, free call 800 250 250 |
| Telephone number Romania | : | +40 21 318 36 06 ( Monday - Friday between 8:00 -15:00, local hour) |
| Telephone number Slovakia | : | NATIONAL TOXICOLOGICAL INFORMATION CENTER - Non-stop 24-hour consultation in case of acute intoxication<br>+421 2 5477 4166 |
| Telephone number Spain | : | 915 620 420 |
| Telephone number Sweden | : | Poison Information Center: 112 |
| Telephone number Switzerland | : | |
| Telephone number United Kingdom: Northern Ireland | : | |

**Supplier**

| | | |
|---|---|---|
| Telephone number Austria | : | +43 13649237 |
| Telephone number Belgium | : | +32 28083237 |
| Telephone number Bulgaria | : | +359 32570104 |
| Telephone number Croatia | : | +385 17776920 |
| Telephone number Czech Republic | : | +420 228880039 |
| Telephone number Denmark | : | +45 69918573 |
| Telephone number Estonia | : | +372 6681294 |
| Telephone number Finland | : | +358 942419014 |
| Telephone number France | : | +33 975181407 |
| Telephone number Germany | : | +49 69643508409 / 0800-181-7059 |
| Telephone number Greece | : | +30 2111768478 |
| Telephone number Hungary | : | +36 18088425 |
| Telephone number Ireland | : | +353 19014670 |
| Telephone number Italy | : | +39 0245557031 / 800-789-767 |
| Telephone number Latvia | : | +371 66165504 |
| Telephone number Lithuania | : | +370 52140238 |
| Telephone number Luxembourg | : | 352-20202416 |
| Telephone number Malta | : | - |
| Telephone number Netherlands | : | +31 858880596 |
| Telephone number Norway | : | - |
| Telephone number Poland | : | +48 223988029 |
| Telephone number Portugal | : | +351 308801773 |

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

| | | |
|---|---|---|
| Telephone number Romania | : | +40 37 6300026 |
| Telephone number Slovakia | : | +421 233057972 |
| Telephone number Slovenia | : | +38 618888016 |
| Telephone number Spain | : | +34 931768545 |
| Telephone number Sweden | : | +46 852503403 |
| Hours of operation | : | 24 / 7 |

# SECTION 2: Hazards identification

## 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Eye Dam. 1, H318
STOT SE 3, H335
STOT RE 2, H373

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## 2.2 Label elements

**Hazard pictograms** :

**Signal word** : Danger

**Hazard statements** :
H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**General** : Not applicable.

**Prevention** :
P280 - Wear protective gloves. Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 - Use only outdoors or in a well-ventilated area.
P260 - Do not breathe vapour.

**Response** :
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : P403 + P235 - Store in a well-ventilated place. Keep cool.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** :
xylene (mixture of isomeres)
polyaminoamide adduct
Reaction mass of ethylbenzene and xylene
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
butan-1-ol

## SECTION 2: Hazards identification

**Supplemental label elements** : Not applicable.

**Supplemental label elements : Detergents - Regulation (EC) No 907/2006** : Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

**Europe**

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| xylene (mixture of isomeres) | REACH #: 01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7 | ≥10 - ≤25 | 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<br>Aquatic Chronic 3, H412 | ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| polyaminoamide adduct | CAS: - | ≤10 | Eye Dam. 1, H318 | - | [1] |
| Reaction mass of ethylbenzene and xylene | REACH #: 01-2119488216-32<br>List #: 905-588-0 | ≤10 | 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 | ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty | EC: 500-191-5<br>CAS: 68082-29-1 | ≤10 | Eye Dam. 1, H318 | - | [1] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| acids and triethylenetetramine | | | | | |
| butan-1-ol | REACH #: 01-2119484630-38<br>EC: 200-751-6<br>CAS: 71-36-3<br>Index: 603-004-00-6 | ≤5 | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT SE 3, H336 | ATE [Oral] = 790 mg/kg | [1] |
| 1-methoxy-2-propanol | REACH #: 01-2119457435-35<br>EC: 203-539-1<br>CAS: 107-98-2<br>Index: 603-064-00-3 | ≤5 | Flam. Liq. 3, H226<br>STOT SE 3, H336<br><br>**See Section 16 for the full text of the H statements declared above.** | - | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

List numbers have no legal significance.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## SECTION 4: First aid measures

**Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

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

**Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

## SECTION 5: Firefighting measures

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

### 7.1 Precautions for safe handling

## SECTION 7: Handling and storage

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Seveso Directive - Reporting thresholds**

**Danger criteria**

| Category | Notification and MAPP threshold | Safety report threshold |
|---|---|---|
| P5c | 5000 tonne | 50000 tonne |

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

**Occupational exposure limits / Biological exposure indices**

**Europe**

| Product/ingredient name | Exposure limit values |
|---|---|
| xylene (mixture of isomeres) | **EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values**<br>STEL: 442 mg/m³ 15 minutes.<br>STEL: 100 ppm 15 minutes.<br>TWA: 221 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| Reaction mass of ethylbenzene and xylene | **EU OEL (Europe, 10/2019). [xylene, mixed isomers] Absorbed through skin. Notes: list of indicative occupational exposure limit values**<br>STEL: 442 mg/m³ 15 minutes. |

## SECTION 8: Exposure controls/personal protection

| | |
|---|---|
| | STEL: 100 ppm 15 minutes.<br>TWA: 221 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| 1-methoxy-2-propanol | **EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values**<br>TWA: 100 ppm 8 hours.<br>TWA: 375 mg/m³ 8 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 568 mg/m³ 15 minutes. |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|---|---|---|---|---|
| xylene (mixture of isomeres) | DNEL | Short term Inhalation | 289 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 289 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 180 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 174 mg/m³ | General population [Consumers] | Local |
| | DNEL | Short term Inhalation | 174 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Inhalation | 14,8 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 108 mg/m³ | General population [Consumers] | Systemic |
| Reaction mass of ethylbenzene and xylene | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 212 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 65,3 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 65,3 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 125 mg/kg bw/day | General population | Systemic |

## SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|---|---|---|---|---|
| | DNEL | Long term Oral | 12,5 mg/kg bw/day | General population | Systemic |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | DNEL | Long term Oral | 0,56 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0,56 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0,97 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 1,1 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 3,9 mg/m³ | Workers | Systemic |
| butan-1-ol | DNEL | Long term Inhalation | 310 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 55 mg/m³ | General population [Consumers] | Local |
| | DNEL | Long term Oral | 3,125 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 3,125 mg/kg bw/day | General population [Consumers] | Systemic |
| 1-methoxy-2-propanol | DNEL | Short term Inhalation | 553,5 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 369 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 50,6 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 43,9 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Dermal | 18,1 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Long term Oral | 3,3 mg/kg bw/day | General population [Consumers] | Systemic |

**PNECs**

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---|---|---|---|
| xylene (mixture of isomeres) | Fresh water | 0,327 mg/l | - |
| | Marine water | 0,327 mg/l | - |
| | Fresh water sediment | 12,46 mg/kg | - |
| | Marine water sediment | 12,46 mg/kg | - |
| | Soil | 2,31 mg/kg | - |
| | Sewage Treatment Plant | 6,58 mg/l | - |
| Reaction mass of ethylbenzene and xylene | Fresh water | 0,327 mg/l | - |
| | Marine water | 0,327 mg/l | - |
| | Fresh water sediment | 12,46 mg/kg | - |
| | Marine water sediment | 12,46 mg/kg | - |
| | Soil | 2,31 mg/kg | - |
| | Sewage Treatment Plant | 6,58 mg/l | - |
| butan-1-ol | Fresh water | 0,082 mg/l | - |
| | Marine | 0,0082 mg/l | - |
| | Fresh water sediment | 0,178 mg/kg | - |
| | Marine water sediment | 0,0178 mg/kg | - |

## SECTION 8: Exposure controls/personal protection

| | | | |
|---|---|---|---|
| | Soil | 0,015 mg/kg | - |
| | Sewage Treatment Plant | 2476 mg/l | - |
| 1-methoxy-2-propanol | Fresh water | 10 mg/l | - |
| | Fresh water sediment | 41,6 mg/l | - |
| | Marine water sediment | 4,17 mg/l | - |
| | Soil | 2,47 mg/l | - |
| | Sewage Treatment Plant | 100 mg/l | - |

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): polyvinyl alcohol (PVA) or polyethylene (PE)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

## SECTION 8: Exposure controls/personal protection

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type A) (EN 140) .

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Physical state** : Liquid.

**Colour** : Grey.

**Odour** : Solvent-like

**Odour threshold** : Not available.

**Melting point/freezing point** : <-40°C

**Initial boiling point and boiling range** : 119°C (246,2°F) [Literature]

**Flammability (solid, gas)** : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Slightly flammable in the presence of the following materials or conditions: shocks and mechanical impacts.
Vapour may travel a considerable distance to source of ignition and flash back.

**Lower and upper explosion limit** : Lower: 2%
Upper: 12%

**Flash point** : Closed cup: 25°C (77°F) [Literature]

**Auto-ignition temperature** : >450°C (>842°F) [Literature]

**Decomposition temperature** : Not available.

**pH** : Not applicable.

**pH : Justification** : Product is non-soluble (in water).

**Viscosity** : Dynamic (room temperature): >3000 mPa·s [ISO EN BS DIN 3219]
Kinematic (room temperature): >1863 $mm^2/s$ [calculated.]
Kinematic (40°C): >20,5 $mm^2/s$ [calculated.]

**Solubility(ies)** :

| Media | Result |
|---|---|
| acetone | Partially soluble |

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

## SECTION 9: Physical and chemical properties

**Vapour pressure** : 0,6 kPa (4,5 mm Hg) [calculated.]

**Evaporation rate** : 0,7 (Butyl acetate. = 1)

**Relative density** : Not available.

**Density** : 1,57 to 1,63 g/cm³ [20°C (68°F)] [DIN 53217]

**Vapour density** : >1 [Air = 1]

**Explosive properties** : Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
No unusual hazard if involved in a fire.

**Oxidising properties** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:
oxidising materials

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| xylene (mixture of isomeres) | LD50 Dermal | Rabbit | 4,2 g/kg | - |
| | LD50 Dermal | Rabbit | 1100 mg/kg | - |
| | LD50 Dermal | Rabbit | 1700 mg/kg | - |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| | TDLo Dermal | Rabbit | 4300 mg/kg | - |
| Reaction mass of ethylbenzene and xylene | LC50 Inhalation Vapour | Rat | 27124 mg/m³ | 4 hours |
| butan-1-ol | LC50 Inhalation Vapour | Rat | 25 mg/l | 4 hours |
| | LC50 Inhalation Vapour | Rat | 24000 mg/m³ | 4 hours |
| | LC50 Inhalation Vapour | Rat | 8000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 3400 mg/kg | - |
| | LD50 Oral | Rat | 0,79 g/kg | - |
| 1-methoxy-2-propanol | LC50 Inhalation Vapour | Rat | 30,02 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 13 g/kg | - |
| | LD50 Oral | Mouse | 11700 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | 4016 mg/kg | - |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

# SECTION 11: Toxicological information

## Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| xylene (mixture of isomeres) | 4300 | 1100 | N/A | 11 | N/A |
| Reaction mass of ethylbenzene and xylene | N/A | 1100 | N/A | 11 | N/A |
| butan-1-ol | 790 | 3400 | N/A | 24 | N/A |

## Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| xylene (mixture of isomeres) | Eyes - Mild irritant | Rabbit | - | 87 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | - | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 microliters | - |
| | Skin - Moderate irritant | Rabbit | - | 100 Percent | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | Eyes - Severe irritant | Rabbit | - | - | - |
| | Skin - Mild irritant | Human | - | - | - |
| butan-1-ol | Eyes - Severe irritant | Rabbit | - | 0.005 Mililiters | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |

## Conclusion/Summary

**Skin** : Causes skin irritation.

**Eyes** : Causes serious eye damage.

**Respiratory** : May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

## Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|---|---|---|---|
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | skin | Mouse | Sensitising |

## Conclusion/Summary

**Skin** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

## Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| butan-1-ol | OECD 471 Bacterial Reverse Mutation Test | Subject: Bacteria | Negative |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Carcinogenicity

## SECTION 11: Toxicological information

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Reproductive toxicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Teratogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| xylene (mixture of isomeres) | Category 3 | - | Respiratory tract irritation |
| Reaction mass of ethylbenzene and xylene | Category 3 | - | Respiratory tract irritation |
| butan-1-ol | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| 1-methoxy-2-propanol | Category 3 | - | Narcotic effects |

**Specific target organ toxicity (repeated exposure)**

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| xylene (mixture of isomeres) | Category 2 | - | - |
| Reaction mass of ethylbenzene and xylene | Category 2 | - | - |

**Aspiration hazard**

| Product/ingredient name | Result |
|---|---|
| xylene (mixture of isomeres) | ASPIRATION HAZARD - Category 1 |
| Reaction mass of ethylbenzene and xylene | ASPIRATION HAZARD - Category 1 |

**Information on likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

**Potential acute health effects**

**Eye contact** : Causes serious eye damage.

**Inhalation** : May cause respiratory irritation.

**Skin contact** : Causes skin irritation.

**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Short term exposure**

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Reaction mass of ethylbenzene and xylene | NOEC 0,44 mg/l | Algae | 72 hours |
| | NOEC 0,96 mg/l | Daphnia spec. | 7 days |
| | NOEC 1,3 mg/l | Fish | 56 days |
| butan-1-ol | Acute EC50 2072 to 1983000 µg/l Fresh water | Daphnia spec. - *Daphnia magna* | 48 hours |
| | Acute LC50 1940000 µg/l Fresh water | Fish - *Pimephales promelas* - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| 1-methoxy-2-propanol | Acute EC50 >1000 mg/l | Algae - *Selenastrum capricomutum* | 7 days |
| | Acute EC50 23300 mg/l | Daphnia spec. | 96 hours |
| | Acute LC50 6812 mg/l Fresh water | Fish | 96 hours |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### 12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| xylene (mixture of isomeres) | - | 90 % - Readily - 5 days | - | - |
| butan-1-ol | - | 92 % - Readily - 20 days | - | - |
| | OECD 301B | >70 % - Readily - 19 days | - | - |
| 1-methoxy-2-propanol | OECD 301E | 96 % - Readily - 28 days | - | - |
| | OECD 301C | 88 to 92 % - Readily - 28 days | - | - |
| | - | >90 % - Readily - 5 days | 1,95 $gO_2/g$ ThOD | - |

**Conclusion/Summary** : This product has not been tested for biodegradation.
Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| xylene (mixture of isomeres) | - | - | Readily |
| butan-1-ol | - | - | Readily |
| 1-methoxy-2-propanol | Fresh water <28 days, 5 to 25°C | - | Readily |

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| xylene (mixture of isomeres) | 3,12 | 8.1 to 25.9 | Low |
| butan-1-ol | 1 | - | Low |
| 1-methoxy-2-propanol | <1 | <100 | Low |

### 12.4 Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Mobility** : This product is not likely to volatilise rapidly into the air because of its low vapour pressure.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

### 13.1 Waste treatment methods

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**European waste catalogue (EWC)**

| Waste code | Waste designation |
|---|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---|---|---|---|---|
| **14.1 UN number or ID number** | UN1263 | UN1263 | UN1263 | UN1263 |
| **14.2 UN proper shipping name** | Paint | Paint | Paint | Paint |
| **14.3 Transport hazard class(es)** | 3  | 3  | 3  | 3  |
| **14.4 Packing group** | III | III | III | III |
| **14.5 Environmental hazards** | No. | No. | No. | No. |
| **Additional information** | **Limited quantity** 5L **Special provisions** 163, 367, 650 **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. **Tunnel code** (D/E) | **Special provisions** 163, 367, 650 **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. **Remarks** : ≤ 5L: Limited Quantity | **Emergency schedules** F-E +S-E **Special provisions** 163, 223, 367, 955 **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5. **Remarks** : ≤ 5L: Limited Quantity - IMDG 3.4 | **Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344. **Special provisions** A3, A72, A192 |

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

No listed substance

**Labelling** : Not applicable.

## SECTION 15: Regulatory information

### Other EU regulations

**VOC** :

**VOC for Ready-for-Use Mixture** : 2004/42/EC - IIA/j: 500g/l (2010). <= 493g/l VOC.

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Explosive precursors** : Not applicable.

### Ozone depleting substances (1005/2009/EC)

Not listed.

### Prior Informed Consent (PIC) (649/2012/EC)

Not listed.

### Persistent Organic Pollutants (850/2004/EC)

Not listed.

### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

| Category |
| --- |
| P5c |

### National regulations

#### Austria

**VbF class** : Not regulated.

**Storage code** : LGK 3

**Classification, packaging and labelling** : Not available.

**Limitation of the use of organic solvents** : Permitted.

**Waste catalogue** : 55513

**References** : Federal Law Gazette Nr. 240/1991 - Regulation on Combustible liquids - Warning Classes
Ministry of the Economy and Labor 2003 - GKV 2003 - Decree 429/2011
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

#### Belgium

**References** : Royal Decree of 2 December 1993 concerning the protection of workers against the risks related to exposure to carcinogens and mutagens at work
Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work
Royal Decree 396/2006, which establishes minimum health and safety requirements for the protection of workers from risk of exposure to asbestos at the workplace.
Royal Decree of 17 May 2007, ammending the Royal Decree of 11 March 2002 relating to the protection of the health and the safety of workers against the risks related to chemical agents in the workplace, Belgium State Gazette 2007-2327 of 7

## SECTION 15: Regulatory information

June 2007.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Bulgaria**

**References** : Ordinance No. 9 of 4 August 2006 on the protection of workers from the risks related to exposure to asbestos at work
Ordinance No. 13 of 30 December 2003 on the protection of workers from the risks related to exposure to chemical agents at work
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Croatia**

**References** : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93
Regulation about application of personal safety equipment NN 39/06
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Cyprus**

**References** : -

**Czech Republic**

**Storage code** : II

**References** : Decree of the government no. 441/2004 Sb., which amends Decree of the government no. 178/2001 Sb., which implements the health and safety at work conditions, according to the Decree of the government no. 523/2002 Sb.
Decree of the government no. 194/2001 Sb., which implements the technical requirements for aerosol dispensers

REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Denmark**

**Product registration number** : 841687
PCN

**Danish fire class** : II-1

**Denmark – Cancer risks** : Not listed

**MAL-code** : 4-5

**Protection based on MAL** : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

**General:** Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

## SECTION 15: Regulatory information

MAL-code: 4-5
**Application:** When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask, protective clothing and eye protection must be worn.

When spraying in new* booths if the operator is outside the spray zone.

- Air-supplied half mask and eye protection must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone. During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and protective clothing must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

**Caution** The regulations contain other stipulations in addition to the above.

*See Regulations.

**MAL-code for ready-for-use mixture** : 3-5

**Protection based on MAL for ready-for-use mixture** : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

**General:** Gloves must be worn for all work that may result in soiling.Apron/coveralls/ protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product.A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

## SECTION 15: Regulatory information

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 3-5
**Application:** When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask, protective clothing and eye protection must be worn.

When spraying in new* booths if the operator is outside the spray zone.

- Air-supplied half mask and eye protection must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone. During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone.

- Air-supplied full mask and protective clothing must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

**Caution** The regulations contain other stipulations in addition to the above.

*See Regulations.

**Low-boiling liquids** : Not available.

**Restrictions on use** : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

**Statutory Order 517 on Aerosols** : Not applicable.

**List of undesirable substances** : Not listed

## SECTION 15: Regulatory information

**Carcinogenic waste** : Not applicable.

**Waste card number** : 03.21

**Waste group** : H

**Remark** : Not available.

**References** : Executive Order no. 301 of 13 May 1993 “Executive order on the determination of code numbers”. (MAL code)
Executive Order no. 302 of 13 May 1993 “Executive Order on work with products with code numbers”. (MAL code)
Executive Order no. 559 of 4 July 2002 "Executive Order on special duties for manufacturers, suppliers and importers etc. of substances and materials according to the law on the working environment".
Executive Order no. 908 of 27 September 2005 "Executive Order on measures for prevention of cancer risk when working with substances and materials".
Executive Order no. 239 of 6 April 2005 "Executive Order on young people's work".
Danish Working Environment Authority Guidance No. C.0.1. of August 2007 "Trace limit value list for substances and materials".
Executive Order no. 571 of 29 November 1984 "Executive Order on use of propellants and solvents in aerosol containers".
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Estonia**

**References** : Regulation of the Estonian Government of 02.02.2000 No. 32 Occupational health and occupational safety requirements for asbestos.
Regulation of the Estonian Government of 15.12.2005 No. 309 Occupational health and occupational safety requirements for carcinogenic and mutagenic substances.
Regulation of the Estonian Government of 18.09.2001 No. 293 Occupational exposure limits of chemicals.
Regulation of the Estonian Government of 20.03.2001 No. 105 Occupational health and occupational safety requirements for handling dangerous chemicals and materials.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
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**Finland**

**NACE** : Not available.

**UC62** : Not available.

**References** : Regulation of the Ministry of Social Affairs and Health on occupational exposure limit values 795/2007
Aerosol regulation amendment 805/1994
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**France**

**Social Security Code, Articles L 461-1 to L 461-7** :

| | |
|---|---|
| xylene (mixture of isomeres) | RG 4bis |
| Reaction mass of ethylbenzene and xylene | RG 4bis |
| butan-1-ol | RG 84 |
| 1-methoxy-2-propanol | RG 84 |

**Classified installations for environmental protection** : Not available.

## SECTION 15: Regulatory information

**Reinforced medical surveillance** : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: applicable

**Remark** : Not available.

**References** : Tables of anticipated professional diseases according to article R461-3 of the labour code
Labour code: Regulatory and recommended occupational exposure limits: Art. R231-55 to Art. R231-55-3.
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
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### Germany

**Storage class (TRGS 510)** : 3

### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

#### Named substances

| Name | Reference number |
|---|---|
| | |

#### Danger criteria

| Category | Reference number |
|---|---|
| P5c | 1.2.5.3 |

**Hazard class for water** : 1

**Technical instruction on air quality control** : TA-Luft Number 5.2.5: 22,8%
TA-Luft Class III - Number 5.2.2: 20%

**AOX** : Not available.

**References** : Decree No. 44/2000 (XII.27.) EüM of the Ministry of Health on detailed arrangements for certain procedures, activities relating to dangerous substances and dangerous preparations plus amendments
Decree No. 25/2000 (IX.30.) EüM of the Ministry of Health on chemical safety at work plus amendments
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Greece

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

### Hungary

**References** : Regulation on the restrictions on the marketing and use of certain dangerous substances, preparations and articles according to the Chemicals Law
Technical Rules for Hazardous Substances (TRGS): Occupational Exposure Limits (TRGS 900)
Technical Rules for Hazardous Substances (TRGS): Directory of carcinogenic, mutagenic and reprotoxic substances (TRGS 905)
First General Administrative Regulation Pertaining to the Federal Immission Control Act (Technical Instructions on Air Quality Control – TA Luft)
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
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### Ireland

## SECTION 15: Regulatory information

**References** : Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)
Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 (S.I. No. 78 of 2001)
Safety, Health and Welfare at Work (General Application) Regulations 2007
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
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**Italy**

**D.Lgs. 152/06** : Not determined.

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

**Latvia**

**References** : Regulation of Cabinet of Ministers No. 325 of 15 May 2007 "Labour protection requirements for contact with chemical substances in the workplace"
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Lithuania**

**References** : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93
Regulation about application of personal safety equipment NN 39/06
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Luxembourg**

**References** : -

**Malta**

**References** : -

**Netherlands**

**Water Discharge Policy (ABM)** : A(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

**Remark** : Storage class (NL) K 2

**References** : Water Discharge Policy (ABM)
Netherlands Emission Guidelines for Air (NeR)
List of carcinogenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act
List of mutagenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act
Non-limited list of reprotoxic substances (with additional registration requirement) according to article 4..2a(2) of the Working Conditions Act; Health and Safety Act
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Poland**

## SECTION 15: Regulatory information

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Portugal**

**References** : Occupational Health and Safety. Professional exposure limit values for chemical agents (NP 1796 2007)
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Romania**

**References** : Order 595-2002 approving technical Regulations regarding spray aerosol containers
Governmental Decision 1218-2006 on establishing the minimum requirements of labour safety and health for ensuring the protection of workers against risks connected to the presence of chemical agents
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Slovakia**

**References** : Government regulation no. 45/2002 Consolidated to 16 January 2002 on the protection of health at work from chemical agents
Government Regulation 301/2007 on the protection of workers from risks associated with exposure to carcinogenic and mutagenic factors
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Slovenia**

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Spain**

**References** : Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work
ROYAL DECREE 2549/1994. Regulation on aerosol dispensers
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**Sweden**

**Ordinance on Thermoset Plastics** : Not applicable.

**Thermoset plastic waste** : Not available.

**Waste group** : 080111*

**Flammable liquid class (SRVFS 2005:10)** : 2a

## SECTION 15: Regulatory information

**References** : Thermosetting plastics AFS 2005:18
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

**International regulations**

**Stockholm Convention on Persistent Organic Pollutants**

| List name | Ingredient name | Status |
|---|---|---|
| Not listed. | | |

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

| List name | Ingredient name | Status |
|---|---|---|
| Not listed. | | |

**CN code** : 3208 90 91 00

**Inventory list**

**Australia** : At least one component is not listed.

**Canada** : At least one component is not listed.

**China** : Not determined.

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

**Japan** : **Japan inventory (CSCL)**: Not determined.
**Japan inventory (ISHL)**: Not determined.

**New Zealand** : At least one component is not listed.

**Philippines** : At least one component is not listed.

**Republic of Korea** : At least one component is not listed.

**Taiwan** : At least one component is not listed.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** : Not determined.

**Viet Nam** : Not determined.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

## SECTION 16: Other information

| Classification | Justification |
|---|---|
| Flam. Liq. 3, H226 | Expert judgment |
| Skin Irrit. 2, H315 | Expert judgment |
| Eye Dam. 1, H318 | Expert judgment |
| STOT SE 3, H335 | Expert judgment |
| STOT RE 2, H373 | Expert judgment |

**Full text of abbreviated H statements**

**Europe**

**Full text of abbreviated H statements** :

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Full text of classifications [CLP/GHS]** :

| | |
|---|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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**Notice to reader**

**IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.**

**MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety**

## SECTION 16: Other information

**laws.**

**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**