

# SAFETY DATA SHEET



## Penguard Tie Coat 100 Comp B

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

#### 1.1 Product identifier

**Product name** : Penguard Tie Coat 100 Comp B  
**UFI** : PAQ1-M06H-600D-MU1K  
**Product code** : 621  
**Product description** : Hardener.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

Use in coatings - Industrial use  
Use in coatings - Professional use

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

Jotun A/S  
P.O.Box 2021  
3202 Sandefjord  
Norway  
Tel: + 47 33 45 70 00  
Fax: +47 33 45 72 42  
E-mail: SDSJotun@jotun.no

Jotun Paints (Europe) Ltd.  
Stather Road  
Flixborough, Scunthorpe  
North Lincolnshire  
DN15 8RR  
England  
Tel: +44 17 24 40 00 00  
Fax: +44 17 24 40 01 00

#### 1.4 Emergency telephone number

##### National advisory body/Poison Centre

**Telephone number** : Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

##### Supplier

**Telephone number** : +47 33 45 70 00 Jotun Norway (head office)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

##### Classification according to UK CLP/GHS

Flam. Liq. 3, H226  
Skin Corr. 1C, H314  
Eye Dam. 1, H318  
STOT SE 3, H335  
STOT SE 3, H336  
STOT RE 2, H373  
Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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

## SECTION 2: Hazards identification

### Hazard pictograms

:



### Signal word

: Danger.

### Hazard statements

: H226 - Flammable liquid and vapour.  
H314 - Causes severe skin burns and eye damage.  
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.

### Precautionary statements

#### General

: Not applicable.

#### Prevention

: P280 - Wear protective gloves, protective clothing and eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 - Avoid release to the environment.  
P260 - Do not breathe vapour or spray.

#### Response

: P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.  
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.  
P363 - Wash contaminated clothing before reuse.  
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 + P233 - Store in a well-ventilated place. Keep container tightly closed.

#### Disposal

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

### Supplemental label elements

: EUH208 - Contains amines, polyethylenepoly-, triethylenetetramine fraction and 2,2'-iminodiethylamine. May produce an allergic reaction.

### 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

| Product/ingredient name                                  | Identifiers  | %         | Classification  | Type    |
|--|--|-----------|---|---------|
| xylene   | REACH #:<br>01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | ≥25 - ≤47 | 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>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412  | [1] [2] |
| butan-1-ol   | REACH #:<br>01-2119484630-38<br>EC: 200-751-6<br>CAS: 71-36-3<br>Index: 603-004-00-6   | ≥10 - ≤20 | 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   | [1] [2] |
| ethylbenzene   | REACH #:<br>01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4  | ≥10 - ≤15 | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373<br>(hearing organs)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412   | [1] [2] |
| 2,4,6-tris(dimethylaminomethyl) phenol                   | REACH #:<br>01-2119560597-27<br>EC: 202-013-9<br>CAS: 90-72-2<br>Index: 603-069-00-0   | ≤10       | Acute Tox. 4, H302<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318   | [1]     |
| hydrocarbons, C9, aromatics                              | REACH #:<br>01-2119455851-35<br>EC: 265-199-0<br>CAS: 64742-95-6                       | ≤10       | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411  | [1]     |
| 1-methoxy-2-propanol                                     | REACH #:<br>01-2119457435-35<br>EC: 203-539-1<br>CAS: 107-98-2<br>Index: 603-064-00-3  | ≤10       | Flam. Liq. 3, H226<br>STOT SE 3, H336   | [1] [2] |
| amines, polyethylenepoly-, triethylenetetramine fraction | REACH #:<br>01-2119487919-13<br>EC: 292-588-2<br>CAS: 90640-67-8                       | <1        | Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412  | [1]     |
| 2,2'-iminodiethylamine                                   | REACH #:<br>01-2119473793-27<br>EC: 203-865-4<br>CAS: 111-40-0                         | ≤0.85     | Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Acute Tox. 2, H330<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT SE 3, H335<br><br><b>See Section 16 for the full text of the H statements declared above.</b> | [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.

**SECTION 3: Composition/information on ingredients**Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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.
- 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**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

**SECTION 4: First aid measures**

Contains amines, polyethylenepoly-, triethylenetetramine fraction, 2,2'-iminodiethylamine. May produce an allergic reaction.

**Over-exposure signs/symptoms**

- |                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness  |
| <b>Inhalation</b>   | : Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness |
| <b>Skin contact</b> | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur  |
| <b>Ingestion</b>    | : Adverse symptoms may include the following:<br>stomach pains  |

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

- |                            |   |
|----------------------------|---|
| <b>Notes to physician</b>  | : 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. |
| <b>Specific treatments</b> | : No specific treatment.  |

See toxicological information (Section 11)

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- |                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | : Recommended: alcohol-resistant foam, CO <sub>2</sub> , powders, water spray. |
| <b>Unsuitable extinguishing media</b> | : Do not use water jet.  |

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

- |  |  |
|--|--|
| <b>Hazards from the substance or mixture</b> | : 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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| <b>Hazardous combustion products</b>         | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides  |

**5.3 Advice for firefighters**

- |   |  |
|---|--|
| <b>Special protective actions for fire-fighters</b>   | : 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. |
| <b>Special protective equipment for fire-fighters</b> | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  |

## 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). Water polluting material. May be harmful to the environment if released in large quantities.

### 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### 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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- 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. Avoid release to the environment. 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. 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



**SECTION 7: Handling and storage**

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             |

See Technical Data Sheet / packaging for further information.

**7.3 Specific end use(s)**

**Recommendations** : Not available.

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

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

| Product/ingredient name | Exposure limit values   |
|-------------------------|---|
| xylene                  | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 441 mg/m <sup>3</sup> 15 minutes.<br>STEL: 100 ppm 15 minutes.<br>TWA: 220 mg/m <sup>3</sup> 8 hours.<br>TWA: 50 ppm 8 hours.  |
| butan-1-ol              | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 154 mg/m <sup>3</sup> 15 minutes.<br>STEL: 50 ppm 15 minutes.  |
| ethylbenzene            | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 552 mg/m <sup>3</sup> 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 100 ppm 8 hours.<br>TWA: 441 mg/m <sup>3</sup> 8 hours. |
| 1-methoxy-2-propanol    | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 560 mg/m <sup>3</sup> 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 375 mg/m <sup>3</sup> 8 hours.<br>TWA: 100 ppm 8 hours. |
| 2,2'-iminodiethylamine  | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>TWA: 4.3 mg/m <sup>3</sup> 8 hours.<br>TWA: 1 ppm 8 hours.   |

**Biological exposure indices**

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

**SECTION 8: Exposure controls/personal protection**

| Product/ingredient name                | Type | Exposure              | Value                    | Population         | Effects  |
|--|------|-----------------------|--------------------------|--------------------|----------|
| xylene                                 | DNEL | Long term Inhalation  | 65.3 mg/m <sup>3</sup>   | General population | Local    |
|  | DNEL | Short term Inhalation | 260 mg/m <sup>3</sup>    | General population | Local    |
|  | DNEL | Short term Inhalation | 260 mg/m <sup>3</sup>    | General population | Systemic |
|  | DNEL | Long term Inhalation  | 221 mg/m <sup>3</sup>    | Workers            | Local    |
|  | DNEL | Long term Oral        | 12.5 mg/kg bw/day        | General population | Systemic |
|  | DNEL | Long term Inhalation  | 65.3 mg/m <sup>3</sup>   | General population | Systemic |
|  | DNEL | Long term Dermal      | 125 mg/kg bw/day         | General population | Systemic |
|  | DNEL | Long term Dermal      | 212 mg/kg bw/day         | Workers            | Systemic |
|  | DNEL | Long term Inhalation  | 221 mg/m <sup>3</sup>    | Workers            | Systemic |
|  | DNEL | Short term Inhalation | 442 mg/m <sup>3</sup>    | Workers            | Local    |
|  | DNEL | Short term Inhalation | 442 mg/m <sup>3</sup>    | Workers            | Systemic |
|  | DNEL | Long term Oral        | 1.5625 mg/kg bw/day      | General population | Systemic |
|  | DNEL | Long term Dermal      | 3.125 mg/kg bw/day       | General population | Systemic |
| butan-1-ol                             | DNEL | Long term Inhalation  | 55.357 mg/m <sup>3</sup> | General population | Systemic |
|  | DNEL | Long term Inhalation  | 155 mg/m <sup>3</sup>    | General population | Local    |
|  | DNEL | Long term Inhalation  | 310 mg/m <sup>3</sup>    | Workers            | Local    |
|  | DNEL | Long term Oral        | 1.6 mg/kg bw/day         | General population | Systemic |
|  | DNEL | Long term Inhalation  | 15 mg/m <sup>3</sup>     | General population | Systemic |
| ethylbenzene                           | DNEL | Long term Inhalation  | 77 mg/m <sup>3</sup>     | Workers            | Systemic |
|  | DNEL | Long term Dermal      | 180 mg/kg bw/day         | Workers            | Systemic |
|  | DNEL | Short term Inhalation | 293 mg/m <sup>3</sup>    | Workers            | Local    |
|  | DMEL | Long term Inhalation  | 442 mg/m <sup>3</sup>    | Workers            | Local    |
|  | DMEL | Short term Inhalation | 884 mg/m <sup>3</sup>    | Workers            | Systemic |
|  | DMEL | Long term Dermal      | 0.2 mg/kg bw/day         | Workers            | Systemic |
|  | DNEL | Long term Inhalation  | 0.31 mg/m <sup>3</sup>   | Workers            | Systemic |
|  | DNEL | Long term Oral        | 0.075 mg/kg bw/day       | General population | Systemic |
| 2,4,6-tris(dimethylaminomethyl) phenol | DNEL | Short term Dermal     | 0.075 mg/kg bw/day       | General population | Systemic |
|  | DNEL | Long term Dermal      | 0.075 mg/kg bw/day       | General population | Systemic |
|  | DNEL | Short term Inhalation | 0.13 mg/m <sup>3</sup>   | General population | Systemic |
|  | DNEL | Long term Inhalation  | 0.13 mg/m <sup>3</sup>   | General population | Systemic |
|  | DNEL | Long term Dermal      | 0.15 mg/kg bw/day        | Workers            | Systemic |
|  | DNEL | Long term             | 0.53 mg/m <sup>3</sup>   | Workers            | Systemic |



**SECTION 8: Exposure controls/personal protection**

|   |      |                                 |                             |                                      |          |
|---|------|---------------------------------|-----------------------------|--------------------------------------|----------|
| hydrocarbons, C9, aromatics                                 | DNEL | Inhalation<br>Short term Dermal | 0.6 mg/kg<br>bw/day         | Workers                              | Systemic |
|   | DNEL | Short term<br>Inhalation        | 2.1 mg/m <sup>3</sup>       | Workers                              | Systemic |
|   | DNEL | Long term Dermal                | 12.5 mg/<br>kg bw/day       | Workers                              | Systemic |
|   | DNEL | Long term<br>Inhalation         | 151 mg/m <sup>3</sup>       | Workers                              | Systemic |
|   | DNEL | Long term Dermal                | 7.5 mg/kg<br>bw/day         | General<br>population<br>[Consumers] | Systemic |
|   | DNEL | Long term<br>Inhalation         | 32 mg/m <sup>3</sup>        | General<br>population<br>[Consumers] | Systemic |
| 1-methoxy-2-propanol  | DNEL | Long term Oral                  | 7.5 mg/kg<br>bw/day         | General<br>population<br>[Consumers] | Systemic |
|   | DNEL | Long term Oral                  | 33 mg/kg<br>bw/day          | General<br>population                | Systemic |
|   | DNEL | Long term<br>Inhalation         | 43.9 mg/m <sup>3</sup>      | General<br>population                | Systemic |
|   | DNEL | Long term Dermal                | 78 mg/kg<br>bw/day          | General<br>population                | Systemic |
|   | DNEL | Long term Dermal                | 183 mg/kg<br>bw/day         | Workers                              | Systemic |
|   | DNEL | Long term<br>Inhalation         | 369 mg/m <sup>3</sup>       | Workers                              | Systemic |
| amines, polyethylenepoly-,<br>triethylenetetramine fraction | DNEL | Short term<br>Inhalation        | 553.5 mg/<br>m <sup>3</sup> | Workers                              | Local    |
|   | DNEL | Short term<br>Inhalation        | 553.5 mg/<br>m <sup>3</sup> | Workers                              | Systemic |
|   | DNEL | Long term<br>Inhalation         | 0.096 mg/<br>m <sup>3</sup> | General<br>population                | Systemic |
|   | DNEL | Long term Oral                  | 0.14 mg/<br>kg bw/day       | General<br>population                | Systemic |
|   | DNEL | Long term<br>Inhalation         | 0.54 mg/m <sup>3</sup>      | Workers                              | Systemic |
|   | DNEL | Long term<br>Inhalation         | 0.87 mg/m <sup>3</sup>      | Workers                              | Local    |
| 2,2'-iminodiethylamine                                      | DNEL | Long term Dermal                | 1.1 mg/cm <sup>2</sup>      | Workers                              | Local    |
|   | DNEL | Short term<br>Inhalation        | 2.6 mg/m <sup>3</sup>       | Workers                              | Local    |
|   | DNEL | Long term<br>Inhalation         | 4.6 mg/m <sup>3</sup>       | General<br>population                | Systemic |
|   | DNEL | Short term Dermal               | 4.88 mg/<br>kg bw/day       | General<br>population                | Systemic |
|   | DNEL | Long term Dermal                | 4.88 mg/<br>kg bw/day       | General<br>population                | Systemic |
|   | DNEL | Long term Dermal                | 11.4 mg/<br>kg bw/day       | Workers                              | Systemic |
|   | DNEL | Long term<br>Inhalation         | 15.4 mg/m <sup>3</sup>      | Workers                              | Systemic |
|   | DNEL | Short term<br>Inhalation        | 27.5 mg/m <sup>3</sup>      | General<br>population                | Systemic |
|   | DNEL | Short term<br>Inhalation        | 92.1 mg/m <sup>3</sup>      | Workers                              | Systemic |
|   | DNEL | Short term<br>Inhalation        |                             |                                      |          |

**PNECs**

**SECTION 8: Exposure controls/personal protection**

| Product/ingredient name                                  | Compartment Detail     | Value            | Method Detail            |
|--|------------------------|------------------|--------------------------|
| xylene   | Fresh water            | 0.327 mg/l       | -                        |
|  | Marine                 | 0.327 mg/l       | -                        |
|  | Sewage Treatment Plant | 6.58 mg/l        | -                        |
|  | Fresh water sediment   | 12.46 mg/kg dwt  | -                        |
|  | Marine water sediment  | 12.46 mg/kg dwt  | -                        |
|  | Soil                   | 2.31 mg/kg dwt   | -                        |
| butan-1-ol   | Fresh water            | 0.082 mg/l       | -                        |
|  | Marine                 | 0.0082 mg/l      | -                        |
|  | Sewage Treatment Plant | 2476 mg/l        | -                        |
|  | Fresh water sediment   | 0.178 mg/kg dwt  | -                        |
|  | Marine water sediment  | 0.0178 mg/kg dwt | -                        |
|  | Soil                   | 0.015 mg/kg dwt  | -                        |
| ethylbenzene   | Fresh water            | 0.1 mg/l         | -                        |
|  | Marine                 | 0.01 mg/l        | -                        |
|  | Sewage Treatment Plant | 9.6 mg/l         | -                        |
|  | Fresh water sediment   | 13.7 mg/kg dwt   | -                        |
|  | Soil                   | 2.68 mg/kg dwt   | -                        |
|  | Secondary Poisoning    | 20 mg/kg         | -                        |
| 2,4,6-tris(dimethylaminomethyl)phenol                    | Fresh water            | 0.084 mg/l       | -                        |
|  | Marine                 | 0.0084 mg/l      | -                        |
|  | Sewage Treatment Plant | 0.2 mg/l         | -                        |
|  | Fresh water sediment   | 52.3 mg/kg dwt   | -                        |
| 1-methoxy-2-propanol                                     | Marine water sediment  | 5.2 mg/kg dwt    | -                        |
|  | Soil                   | 5.49 mg/kg dwt   | -                        |
|  | Fresh water            | 190 µg/l         | Assessment Factors       |
|  | Fresh water sediment   | 95.9 mg/kg       | Equilibrium Partitioning |
| amines, polyethylenepoly-, triethylenetetramine fraction | Marine water           | 38 µg/l          | Assessment Factors       |
|  | Marine water sediment  | 19.2 mg/kg       | Equilibrium Partitioning |
|  | Soil                   | 19.1 mg/kg       | Equilibrium Partitioning |
|  | Sewage Treatment Plant | 4.25 mg/l        | Assessment Factors       |
|  | Secondary Poisoning    | 0.18 mg/kg       | Assessment Factors       |
|  | Fresh water            | 0.56 mg/l        | -                        |
| 2,2'-iminodiethylamine                                   | Marine                 | 0.056 mg/l       | -                        |
|  | Sewage Treatment Plant | 6 mg/l           | -                        |
|  | Fresh water sediment   | 1072 mg/kg dwt   | -                        |
|  | Marine water sediment  | 107.2 mg/kg dwt  | -                        |
|  | Soil                   | 214 mg/kg dwt    | -                        |

**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**

## SECTION 8: Exposure controls/personal protection

**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 to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. 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

#### **Hand 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.

#### **Gloves**

Wear suitable gloves tested to ISO 374-1:2016.

Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), neoprene (> 0.35 mm), butyl rubber (> 0.4 mm)

Recommended, gloves(breakthrough time) > 8 hours: Teflon (> 0.35 mm), nitrile rubber (> 0.4 mm), 4H/Silver Shield® (> 0.07 mm), polyvinyl alcohol (PVA) (> 0.3 mm)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

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.

**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.

**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** : If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoal filter.

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

**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**Appearance

|   |  |
|---|--|
| <b>Physical state</b>                               | : Liquid.  |
| <b>Colour</b>                                       | : Colourless.  |
| <b>Odour</b>  | : Characteristic.  |
| <b>Odour threshold</b>                              | : Not applicable.  |
| <b>Melting point/freezing point</b>                 | : Not applicable.  |
| <b>Initial boiling point and boiling range</b>      | : Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 134.81°C (274.7°F)                               |
| <b>Flammability</b>                                 | : Not applicable.  |
| <b>Upper/lower flammability or explosive limits</b> | : 0.8 - 13.74%   |
| <b>Flash point</b>                                  | : Closed cup: 25°C (77°F)  |
| <b>Auto-ignition temperature</b>                    | : Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).  |
| <b>Decomposition temperature</b>                    | : Not available.   |
| <b>pH</b>   | : Not applicable.  |
| <b>Viscosity</b>                                    | : Kinematic (40°C): >20.5 mm <sup>2</sup> /s   |
| <b>Partition coefficient: n-octanol/ water</b>      | : Not available.   |
| <b>Vapour pressure</b>                              | : Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.83 kPa (6.23 mm Hg) (at 20°C) |
| <b>Evaporation rate</b>                             | : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.73 compared with butyl acetate                          |
| <b>Density</b>                                      | : 0.9 g/cm <sup>3</sup>  |
| <b>Vapour density</b>                               | : Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.45 (Air = 1)  |
| <b>Explosive properties</b>                         | : Not available.   |
| <b>Oxidising properties</b>                         | : Not available.   |
| <u><b>Particle characteristics</b></u>              |  |
| <b>Median particle size</b>                         | : Not applicable.  |

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

|  |  |
|--|--|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.                                     |
| <b>10.2 Chemical stability</b>                 | : Stable under recommended storage and handling conditions (see Section 7).  |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.  |
| <b>10.4 Conditions to avoid</b>                | : When exposed to high temperatures may produce hazardous decomposition products.  |
| <b>10.5 Incompatible materials</b>             | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |
| <b>10.6 Hazardous decomposition products</b>   | : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.        |

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains amines, polyethylenepoly-, triethylenetetramine fraction, 2,2'-iminodiethylamine. May produce an allergic reaction.

**Acute toxicity**

| Product/ingredient name                                     | Result                 | Species                  | Dose         | Exposure |
|---|------------------------|--------------------------|--------------|----------|
| xylene  | LC50 Inhalation Vapour | Rat                      | 20 mg/l      | 4 hours  |
|   | LD50 Oral              | Rat                      | 4300 mg/kg   | -        |
|   | TDLo Dermal            | Rabbit                   | 4300 mg/kg   | -        |
| butan-1-ol  | LD50 Oral              | Rat                      | 790 mg/kg    | -        |
| ethylbenzene  | LC50 Inhalation Vapour | Rat - Male               | 17.8 mg/l    | 4 hours  |
|   | LD50 Dermal            | Rabbit                   | >5000 mg/kg  | -        |
|   | LD50 Oral              | Rat                      | 3500 mg/kg   | -        |
| 2,4,6-tris<br>(dimethylaminomethyl)<br>phenol               | LD50 Oral              | Rat                      | 1673 mg/kg   | -        |
| 1-methoxy-2-propanol  | LD50 Dermal            | Rabbit                   | 13 g/kg      | -        |
|   | LD50 Oral              | Rat                      | 6600 mg/kg   | -        |
| amines, polyethylenepoly-,<br>triethylenetetramine fraction | LD50 Dermal            | Rabbit - Male,<br>Female | 1465.4 mg/kg | -        |
|   | LD50 Oral              | Rat - Male,<br>Female    | 1716.2 mg/kg | -        |
| 2,2'-iminodiethylamine                                      | LC50 Inhalation Vapour | Rat                      | 0.5 mg/l     | 4 hours  |
|   | LD50 Dermal            | Rabbit                   | 1090 mg/kg   | -        |
|   | LD50 Oral              | Rat                      | 1080 mg/kg   | -        |

**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) |
|--|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Penguard Tie Coat 100 Comp B                             | 3773.1       | 3330.3         | N/A                      | 28.9                        | N/A                                 |
| xylene   | 4300         | 1100           | N/A                      | 20                          | N/A                                 |
| butan-1-ol   | 500          | N/A            | N/A                      | N/A                         | N/A                                 |
| ethylbenzene   | 3500         | N/A            | N/A                      | 17.8                        | N/A                                 |
| 2,4,6-tris(dimethylaminomethyl)phenol                    | 1673         | N/A            | N/A                      | N/A                         | N/A                                 |
| 1-methoxy-2-propanol                                     | 6600         | 13000          | N/A                      | N/A                         | N/A                                 |
| amines, polyethylenepoly-, triethylenetetramine fraction | 1716.2       | 1465.4         | N/A                      | N/A                         | N/A                                 |
| 2,2'-iminodiethylamine                                   | 1080         | 1090           | N/A                      | 0.5                         | N/A                                 |

**Irritation/Corrosion**

**SECTION 11: Toxicological information**

| Product/ingredient name                   | Result   | Species          | Score  | Exposure                                   | Observation |
|---|--|------------------|--------|--|-------------|
| xylene                                    | Eyes - Mild irritant<br>Skin - Mild irritant     | Rabbit<br>Rat    | -<br>- | 87 milligrams<br>8 hours 60<br>microliters | -<br>-      |
| 2,4,6-tris<br>(dimethylaminomethyl)phenol | Eyes - Severe irritant                           | Rabbit           | -      | 24 hours 50<br>µg                          | -           |
| 1-methoxy-2-propanol                      | Skin - Severe irritant<br>Eyes - Mild irritant   | Rat<br>Rabbit    | -<br>- | 0.25 ml<br>24 hours 500<br>mg              | -<br>-      |
| 2,2'-iminodiethylamine                    | Skin - Mild irritant<br>Skin - Moderate irritant | Rabbit<br>Rabbit | -<br>- | 500 mg<br>500<br>milligrams                | -<br>-      |

**Sensitisation**

| Product/ingredient name                                     | Route of exposure | Species                         | Result      |
|---|-------------------|---------------------------------|-------------|
| amines, polyethylenepoly-,<br>triethylenetetramine fraction | skin              | Mammal - species<br>unspecified | Sensitising |
| 2,2'-iminodiethylamine                                      | skin              | Mammal - species<br>unspecified | Sensitising |

**Mutagenicity**

No known significant effects or critical hazards.

**Carcinogenicity**

No known significant effects or critical hazards.

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

No known significant effects or critical hazards.

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

| Product/ingredient name     | Category                 | Route of exposure | Target organs                                       |
|-----------------------------|--------------------------|-------------------|---|
| xylene                      | Category 3               | -                 | Respiratory tract<br>irritation                     |
| butan-1-ol                  | Category 3               | -                 | Respiratory tract<br>irritation                     |
| hydrocarbons, C9, aromatics | Category 3<br>Category 3 | -                 | Narcotic effects<br>Respiratory tract<br>irritation |
| 1-methoxy-2-propanol        | Category 3               | -                 | Narcotic effects                                    |
| 2,2'-iminodiethylamine      | Category 3<br>Category 3 | -<br>-            | Narcotic effects<br>Respiratory tract<br>irritation |

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

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene            | Category 2 | -                 | hearing organs |

**Aspiration hazard**

| Product/ingredient name     | Result                         |
|-----------------------------|--------------------------------|
| xylene                      | ASPIRATION HAZARD - Category 1 |
| ethylbenzene                | ASPIRATION HAZARD - Category 1 |
| hydrocarbons, C9, aromatics | ASPIRATION HAZARD - Category 1 |

**Potential acute health effects****Eye contact** : Causes serious eye damage.



**SECTION 11: Toxicological information**

|  |   |
|--|---|
| <b>Inhalation</b>  | : May cause drowsiness or dizziness. May cause respiratory irritation.  |
| <b>Skin contact</b>  | : Causes severe burns.  |
| <b>Ingestion</b>   | : No known significant effects or critical hazards.   |
| <b><u>Symptoms related to the physical, chemical and toxicological characteristics</u></b> |   |
| <b>Eye contact</b>   | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness  |
| <b>Inhalation</b>  | : Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing<br>nausea or vomiting<br>headache<br>drowsiness/fatigue<br>dizziness/vertigo<br>unconsciousness |
| <b>Skin contact</b>  | : Adverse symptoms may include the following:<br>pain or irritation<br>redness<br>blistering may occur  |
| <b>Ingestion</b>   | : Adverse symptoms may include the following:<br>stomach pains  |
| <b>General</b>   | : May cause damage to organs through prolonged or repeated exposure.  |
| <b>Other information</b>   | : None identified.  |

**SECTION 12: Ecological information****12.1 Toxicity**

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

| Product/ingredient name                                  | Result                             | Species   | Exposure |
|--|------------------------------------|---|----------|
| xylene   | Acute LC50 8500 µg/l Marine water  | Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio | 48 hours |
|  | Acute LC50 13400 µg/l Fresh water  | Fish - Fathead minnow - Pimephales promelas                 | 96 hours |
| ethylbenzene   | Acute EC50 7700 µg/l Marine water  | Algae - Diatom - Skeletonema costatum                       | 96 hours |
|  | Acute EC50 2.93 mg/l               | Daphnia   | 48 hours |
|  | Acute LC50 4.2 mg/l                | Fish  | 96 hours |
| hydrocarbons, C9, aromatics                              | Acute EC50 <10 mg/l                | Daphnia   | 48 hours |
|  | Acute IC50 <10 mg/l                | Algae   | 72 hours |
|  | Acute LC50 <10 mg/l                | Fish  | 96 hours |
| amines, polyethylenepoly-, triethylenetetramine fraction | Acute EC50 20 mg/l                 | Algae   | 72 hours |
|  | Acute EC50 31.1 mg/l               | Daphnia   | 48 hours |
|  | Acute LC50 330 mg/l                | Fish  | 96 hours |
| 2,2'-iminodiethylamine                                   | Acute EC50 345600 µg/l Fresh water | Algae - Green algae - Pseudokirchneriella subcapitata       | 96 hours |

**Conclusion/Summary** : This material is harmful to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

**SECTION 12: Ecological information**

| Product/ingredient name                                  | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| xylene   | -                 | -          | Readily          |
| ethylbenzene   | -                 | -          | Readily          |
| hydrocarbons, C9, aromatics                              | -                 | -          | Not readily      |
| amines, polyethylenepoly-, triethylenetetramine fraction | -                 | -          | Not readily      |

**12.3 Bioaccumulative potential**

| Product/ingredient name                                  | LogP <sub>ow</sub> | BCF         | Potential |
|--|--------------------|-------------|-----------|
| xylene   | 3.12               | 8.1 to 25.9 | low       |
| butan-1-ol   | 1                  | -           | low       |
| ethylbenzene   | 3.6                | -           | low       |
| 2,4,6-tris (dimethylaminomethyl) phenol                  | 0.219              | -           | low       |
| hydrocarbons, C9, aromatics                              | -                  | 10 to 2500  | high      |
| 1-methoxy-2-propanol                                     | <1                 | -           | low       |
| amines, polyethylenepoly-, triethylenetetramine fraction | -2.65              | -           | low       |
| 2,2'-iminodiethylamine                                   | -5.58              | 2.8 to 6.3  | low       |

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**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 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**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.

**Waste catalogue**

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

**Packaging**









**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**SECTION 13: Disposal considerations**

| Type of packaging | Waste catalogue  |
|-------------------|--|
| CEPE Guidelines   | 15 01 10* packaging containing residues of or contaminated by 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   |
|--|--|--|---|--|
| <b>14.1 UN number</b>                  | UN3469   | UN3469   | UN3469  | UN3469   |
| <b>14.2 UN proper shipping name</b>    | Paint, flammable, corrosive  | Paint, flammable, corrosive  | Paint, flammable, corrosive   | Paint, flammable, corrosive  |
| <b>14.3 Transport hazard class(es)</b> | 3 (8)<br>  | 3 (8)<br>  | 3 (8)<br>  | 3 (8)<br>  |
| <b>14.4 Packing group</b>              | III  | III  | III   | III  |
| <b>14.5 Environmental hazards</b>      | No.  | Yes.   | No.   | No.  |

**Additional information**

**ADR/RID** : **Hazard identification number** 38  
**Special provisions** 163  
**Tunnel code** (D/E)

**ADN** : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

**IMDG** : **Emergency schedules** F-E, S-C

**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****UK (GB)/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.

**Ozone depleting substances**

**SECTION 15: Regulatory information**

Not listed.

**Prior Informed Consent (PIC)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

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

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria****Category**

P5c

**EU regulations**

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

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

**International regulations****Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

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

Not listed.

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

Not listed.

**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
- GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = GB CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic

**SECTION 16: Other information**

PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

| <b>Classification</b>   | <b>Justification</b>  |
|---|---|
| Flam. Liq. 3, H226<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Aquatic Chronic 3, H412 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**Full text of abbreviated H statements**

|      |  |
|------|--|
| H225 | Highly flammable liquid and vapour.                                |
| H226 | Flammable liquid and vapour.                                       |
| H302 | Harmful if swallowed.  |
| H304 | May be fatal if swallowed and enters airways.                      |
| H312 | Harmful in contact with skin.                                      |
| H314 | Causes severe skin burns and eye damage.                           |
| H315 | Causes skin irritation.  |
| H317 | May cause an allergic skin reaction.                               |
| H318 | Causes serious eye damage.   |
| H319 | Causes serious eye irritation.                                     |
| H330 | Fatal if inhaled.  |
| 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. |
| H411 | Toxic to aquatic life with long lasting effects.                   |
| H412 | Harmful to aquatic life with long lasting effects.                 |

**Full text of classifications**

|                   |   |
|-------------------|---|
| Acute Tox. 2      | ACUTE TOXICITY - Category 2                                     |
| Acute Tox. 4      | ACUTE TOXICITY - Category 4                                     |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2                 |
| 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. 2      | FLAMMABLE LIQUIDS - Category 2                                  |
| Flam. Liq. 3      | FLAMMABLE LIQUIDS - Category 3                                  |
| Skin Corr. 1B     | SKIN CORROSION/IRRITATION - Category 1B                         |
| Skin Corr. 1C     | SKIN CORROSION/IRRITATION - Category 1C                         |
| Skin Irrit. 2     | SKIN CORROSION/IRRITATION - Category 2                          |
| Skin Sens. 1      | SKIN SENSITISATION - Category 1                                 |
| 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**

## SECTION 16: Other information

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