# SAFETY DATA SHEET

TEKNODUR HBS 7-00 (EMAPUR HBS 7-00) - RAL 9016

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

### 1.1 Product identifier

**Product name** : TEKNODUR HBS 7-00 (EMAPUR HBS 7-00) - RAL 9016

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

**Product use** : Paint.

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

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

**e-mail address of person responsible for this SDS** : Prod-safe@teknos.com

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.
Members of the public Number (8 am-10 pm): +353 (0)1 809 2166
Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

## 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 Irrit. 2, H319
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** : Warning

**Hazard statements** : H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**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.
P260 - Do not breathe vapour.
P264 - Wash thoroughly after handling.

**Response** : P314 - Get medical advice/attention if you feel unwell.

## SECTION 2: Hazards identification

**Storage** : Not applicable.

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

**Hazardous ingredients** : Contains: Xylene

**Supplemental label elements** : Contains n-butyl methacrylate and 2-hydroxyethyl methacrylate. May produce an allergic reaction.

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

### 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 | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| Xylene | REACH #: 01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | ≥10 - ≤19 | 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 (oral, inhalation)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412 | ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| n-Butyl acetate | REACH #: 01-2119485493-29<br>EC: 204-658-1<br>CAS: 123-86-4<br>Index: 607-025-00-1 | ≥10 - <20 | Flam. Liq. 3, H226<br>STOT SE 3, H336<br>EUH066 | - | [1] [2] |
| Ethylbenzene | REACH #: 01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4 | ≤3 | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing organs) (oral, inhalation)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412 | ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecanamide) | REACH #: 01-0000017860-69<br>EC: 432-430-3 | ≤1.6 | Aquatic Chronic 4, H413 | - | [1] |
| n-butyl methacrylate | REACH #: 01-2119486394-28<br>EC: 202-615-1<br>CAS: 97-88-1<br>Index: 607-033-00-5 | <1 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>STOT SE 3, H335 | - | [1] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| 2-hydroxyethyl methacrylate | REACH #: 01-2119490169-29<br>EC: 212-782-2<br>CAS: 868-77-9<br>Index: 607-124-00-X | <1 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317 | - | [1] |

Type

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

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

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.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : 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. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention following exposure or if feeling unwell. 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.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : 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. Get medical attention following exposure or if feeling unwell. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

**Over-exposure signs/symptoms**

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

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**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.

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

### 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.

## 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. 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. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

## SECTION 6: Accidental release measures

**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 breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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

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. 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 tonnes | 50000 tonnes |

### 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**

| Product/ingredient name | Exposure limit values |
|---|---|
| Xylene | **NAOSH (Ireland, 4/2024) [xylene]** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values<br>OELV 8 hours: 50 ppm.<br>OELV 8 hours: 221 mg/m³.<br>OELV 15 minutes: 100 ppm.<br>OELV 15 minutes: 442 mg/m³. |
| n-Butyl acetate | **NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values |

| | |
|---|---|
| | OELV 8 hours: 50 ppm.<br>OELV 8 hours: 241 mg/m³.<br>OELV 15 minutes: 150 ppm.<br>OELV 15 minutes: 723 mg/m³. |
| Ethylbenzene | **NAOSH (Ireland, 4/2024)** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values<br>OELV 8 hours: 100 ppm.<br>OELV 8 hours: 442 mg/m³.<br>OELV 15 minutes: 200 ppm.<br>OELV 15 minutes: 884 mg/m³. |

**Biological exposure indices**

| Product/ingredient name | Exposure indices |
|---|---|
| Xylene | **NAOSH BGVs (Ireland, 1/2011) [Xylene]**<br>BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases. |
| Ethylbenzene | **NAOSH BGVs (Ireland, 1/2011)**<br>BMGV: Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question., ethylbenzene [in endexhaled air]. Sampling time: not critical.<br>BMGV: 0.7 g/g creatinine [Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift at end of workweek. |

**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 | Result |
|---|---|
| Xylene | **DNEL - General population - Long term - Oral**<br>5 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>65.3 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Long term - Inhalation**<br>65.3 mg/m³<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Dermal**<br>125 mg/kg bw/day<br>Effects: Systemic |

**DNEL - Workers - Long term - Dermal**
212 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**
221 mg/m³
Effects: Local

**DNEL - Workers - Long term - Inhalation**
221 mg/m³
Effects: Systemic

**DNEL - General population - Short term - Inhalation**
260 mg/m³
Effects: Local

**DNEL - General population - Short term - Inhalation**
260 mg/m³
Effects: Systemic

**DNEL - Workers - Short term - Inhalation**
442 mg/m³
Effects: Local

**DNEL - Workers - Short term - Inhalation**
442 mg/m³
Effects: Systemic

n-Butyl acetate

**DNEL - General population - Long term - Oral**
2 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Short term - Oral**
2 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Long term - Dermal**
3.4 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Short term - Dermal**
6 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Long term - Dermal**
7 mg/kg bw/day
Effects: Systemic

**DNEL - Workers - Short term - Dermal**
11 mg/kg bw/day
Effects: Systemic

**DNEL - General population - Long term - Inhalation**
12 mg/m³
Effects: Systemic

**DNEL - General population - Long term - Inhalation**
35.7 mg/m³
Effects: Local

**DNEL - Workers - Long term - Inhalation**
48 mg/m³
Effects: Systemic

**DNEL - General population - Short term - Inhalation**

| | |
|---|---|
| | 300 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Short term - Inhalation**<br>300 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>300 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>600 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>600 mg/m³<br>Effects: Systemic |
| Ethylbenzene | **DMEL - Workers - Long term - Inhalation**<br>442 mg/m³<br>Effects: Local<br><br>**DMEL - Workers - Short term - Inhalation**<br>884 mg/m³<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Oral**<br>1.6 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>15 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>77 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Dermal**<br>180 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - Workers - Short term - Inhalation**<br>293 mg/m³<br>Effects: Local |
| n-butyl methacrylate | **DNEL - General population - Long term - Dermal**<br>3 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Dermal**<br>5 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>66.5 mg/m³<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>366.4 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Long term - Inhalation**<br>409 mg/m³<br>Effects: Local |

| | |
|---|---|
| | **DNEL - Workers - Long term - Inhalation**<br>415.9 mg/m³<br>Effects: Systemic |
| 2-hydroxyethyl methacrylate | **DNEL - General population - Long term - Oral**<br>0.83 mg/kg bw/day<br>Effects: Systemic |
| | **DNEL - General population - Long term - Dermal**<br>0.83 mg/kg bw/day<br>Effects: Systemic |
| | **DNEL - Workers - Long term - Dermal**<br>1.39 mg/kg bw/day<br>Effects: Systemic |
| | **DNEL - General population - Long term - Inhalation**<br>1.45 mg/m³<br>Effects: Systemic |
| | **DNEL - Workers - Long term - Inhalation**<br>4.9 mg/m³<br>Effects: Systemic |

**PNECs**

Not available.

### 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**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.

Recommendations : Wear suitable gloves tested to EN374.

| | |
|---|---|
| < 1 hour (breakthrough time): | Nitrile gloves. thickness > 0.3 mm |
| 1 - 4 hours (breakthrough time): | polyvinyl alcohol (PVA) thickness > 0.3 mm or 4H / Silver Shield® gloves. |
| > 8 hours (breakthrough time): | Viton® thickness > 0.3 mm gloves |

## SECTION 8: Exposure controls/personal protection

Wash hands before breaks and immediately after handling the product.

**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.

**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.

Filter type: A

Filter type (spray application): A P

**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

**Appearance**

**Physical state** : Liquid.

**Colour** : White.

**Odour** : Slight

**Odour threshold** : Not available.

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| n-Butyl acetate | 126 | 258.8 | OECD 103 |
| Ethylbenzene | 136.1 | 277 | OECD 104 |

**Flammability** : Not available.

**Lower and upper explosion limit** : Lower: 0.8% (xylene)
Upper: 7.6% (n-butyl acetate)

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

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| n-Butyl acetate | 415 | 779 | EU A.15 |
| Xylene | 432 | 809.6 | |

**Decomposition temperature** : Not available.

**pH** : Not applicable.

**Viscosity** : Kinematic (40°C): >20.5 $mm^2/s$

**Solubility(ies)** :

Not available.

**Solubility in water** : Not available.

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

## SECTION 9: Physical and chemical properties

**Vapour pressure** :

| Ingredient name | Vapour Pressure at 20˚C | | | Vapour pressure at 50˚C | | |
|---|---|---|---|---|---|---|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| n-Butyl acetate | 11.25096 | 1.5 | DIN EN 13016-2 | | | |
| Ethylbenzene | 9.30076 | 1.2 | | | | |

**Relative density** : Not available.

**Density** : 1.5 g/cm³

**Vapour density** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

#### 9.2.2 Other safety characteristics

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.

**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 |
|---|---|
| Xylene | **Rat - Oral - LD50**<br>4300 mg/kg<br>Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes<br><br>**Rat - Inhalation - LC50 Vapour**<br>21.7 mg/l [4 hours] |
| n-Butyl acetate | **Rat - Oral - LD50**<br>10760 mg/kg<br>EU<br><br>**Rabbit - Dermal - LD50**<br>14112 mg/kg<br><br>**Rat - Inhalation - LC50 Vapour** |

0.74 mg/l [4 hours]

Ethylbenzene

**Rat - Oral - LD50**
3500 mg/kg

**Rabbit - Dermal - LD50**
15400 mg/kg

**Rat - Inhalation - LC50 Dusts and mists**
29000 mg/l [4 hours]

n-butyl methacrylate

**Rat - Oral - LD50**
16 g/kg

**Rat - Inhalation - LC50 Gas.**
4910 ppm [4 hours]
Toxic effects: Olfaction - Other changes Eye - Other Lung, Thorax, or Respiration - Dyspnea

2-hydroxyethyl methacrylate

**Rat - Oral - LD50**
5050 mg/kg
Toxic effects: Behavioral - Coma

**Conclusion/Summary [Product]** : Not available.

**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) |
|---|---|---|---|---|---|
| TEKNODUR HBS 7-00 (EMAPUR HBS 7-00) | N/A | 8959.6 | N/A | 73.5 | N/A |
| Xylene | 4300 | 1100 | N/A | 11 | N/A |
| n-Butyl acetate | 10760 | 14112 | N/A | N/A | N/A |
| Ethylbenzene | 3500 | 15400 | N/A | 11 | 29000 |
| n-butyl methacrylate | 16000 | N/A | N/A | N/A | N/A |
| 2-hydroxyethyl methacrylate | 5050 | N/A | N/A | N/A | N/A |

**Skin corrosion/irritation**

| Product/ingredient name | Result |
|---|---|
| Xylene | **Rat - Skin - Mild irritant**<br>Duration of treatment/exposure: 8 hours<br>Amount/concentration applied: 60 uL<br><br>**Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg<br><br>**Rabbit - Skin - Moderate irritant**<br>Amount/concentration applied: 100 % |
| n-Butyl acetate | **Rabbit - Skin - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 500 mg |
| Ethylbenzene | **Rabbit - Skin - Mild irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 15 mg |
| n-butyl methacrylate | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 uL |

**Conclusion/Summary [Product]** : Not available.

## SECTION 11: Toxicological information

### Serious eye damage/eye irritation

| Product/ingredient name | Result |
|---|---|
| Xylene | **Rabbit - Eyes - Mild irritant**<br>Amount/concentration applied: 87 mg<br><br>**Rabbit - Eyes - Severe irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 5 mg |
| n-Butyl acetate | **Rabbit - Eyes - Moderate irritant**<br>Amount/concentration applied: 100 mg |
| Ethylbenzene | **Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 500 mg |

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

Not available.

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

| Product/ingredient name | Result |
|---|---|
| Xylene | STOT SE 3, H335 (Respiratory tract irritation) |
| n-Butyl acetate | STOT SE 3, H336 (Narcotic effects) |
| n-butyl methacrylate | STOT SE 3, H335 (Respiratory tract irritation) |

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result |
|---|---|

| | |
|---|---|
| Xylene | STOT RE 2, H373 (oral, inhalation) |
| Ethylbenzene | STOT RE 2, H373 (hearing organs) (oral, inhalation) |

**Aspiration hazard**

| Product/ingredient name | Result |
|---|---|
| Xylene | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene | ASPIRATION HAZARD - Category 1 |

**Information on likely routes of exposure**

Not available.

**Potential acute health effects**

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

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

**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 or irritation
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

**Short term exposure**

**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 [Product]** : Not available.

**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.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result |
|---|---|
| n-Butyl acetate | **Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas*<br>Age: 31 to 32 days; Size: 21.6 mm; Weight: 0.175 g<br>18000 µg/l [96 hours]<br>Effect: Mortality<br><br>**Acute - LC50 - Marine water**<br>Crustaceans - Brine shrimp - *Artemia salina*<br>32 mg/l [48 hours]<br>Effect: Mortality |
| n-butyl methacrylate | **Chronic - NOEC - Fresh water**<br>Daphnia - Water flea - *Daphnia magna* - Neonate<br>Age: <24 hours<br>2.6 mg/l [21 days]<br>Effect: Reproduction |
| 2-hydroxyethyl methacrylate | **Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas* - Juvenile (Fledgling, Hatchling, Weanling)<br>Age: 28 to 34 days; Size: 20.9 mm; Weight: 0.134 g<br>227000 µg/l [96 hours]<br>Effect: Mortality |

**Conclusion/Summary [Product]** : Not available.

### 12.2 Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Xylene | 3.12 | 8.1 to 25.9 | Low |
| n-Butyl acetate | 2.3 | - | Low |
| Ethylbenzene | 3.6 | - | Low |
| n-butyl methacrylate | 2.99 | - | Low |
| 2-hydroxyethyl methacrylate | 0.42 | - | Low |

### 12.4 Mobility in soil

**Soil/water partition coefficient**

| Product/ingredient name | Value |
|---|---|
| n-Butyl acetate | logKoc: 1.5<br>Koc: 33.2139 |
| Ethylbenzene | logKoc: 2.2<br>Koc: 170.406 |
| n-butyl methacrylate | logKoc: 1.8<br>Koc: 70.2421 |
| 2-hydroxyethyl methacrylate | logKoc: 1.3<br>Koc: 20.9282 |

**Results of PMT and vPvM assessment**

## SECTION 12: Ecological information

| Product/ingredient name | PMT | P | M | T | vPvM | vP | vM |
|---|---|---|---|---|---|---|---|
| Xylene | No | No | No | No | No | No | No |
| n-Butyl acetate | No | No | No | No | No | No | No |
| Ethylbenzene | No | No | No | No | No | No | No |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecanamide) | No | No | No | No | No | No | No |
| n-butyl methacrylate | No | No | No | No | No | No | No |
| 2-hydroxyethyl methacrylate | No | No | No | No | No | No | No |

**Mobility** : Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

### 12.5 Results of PBT and vPvB assessment

**Regulation (EC) No. 1907/2006 [REACH]**

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|---|---|---|---|---|---|---|
| Xylene | No | N/A | No | Yes | No | N/A | No |
| n-Butyl acetate | No | N/A | N/A | No | N/A | N/A | N/A |
| Ethylbenzene | N/A | N/A | N/A | Yes | N/A | N/A | N/A |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecanamide) | No | N/A | N/A | No | N/A | N/A | N/A |
| n-butyl methacrylate | No | N/A | N/A | No | N/A | N/A | N/A |
| 2-hydroxyethyl methacrylate | No | N/A | N/A | No | N/A | N/A | N/A |

**Regulation (EC) No. 1272/2008 [CLP]**

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|---|---|---|---|---|---|---|
| Xylene | No | No | No | No | No | No | No |
| n-Butyl acetate | No | No | No | No | No | No | No |
| Ethylbenzene | No | No | No | No | No | No | No |
| N,N'-ethane-1,2-diylbis (12-hydroxyoctadecanamide) | No | No | No | No | No | No | No |
| n-butyl methacrylate | No | No | No | No | No | No | No |
| 2-hydroxyethyl methacrylate | No | No | No | No | No | No | No |

**Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]** : The product does not meet the criteria to be considered as a PBT or vPvB.

### 12.6 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 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** : The classification of the product may meet the criteria for a hazardous waste.

## SECTION 13: Disposal considerations

**European waste catalogue (EWC)** : 080111*, 200127*

**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.

**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**

**ADR/RID** : **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)

**ADN** : **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.

**IMDG** : **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.

**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 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## 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**

## SECTION 15: Regulatory information

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**

| Product/ingredient name | % | Designation [Usage] |
|---|---|---|
| TEKNODUR HBS 7-00 (EMAPUR HBS 7-00) | ≥90 | 3 |

**Labelling** :

**Other EU regulations**

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

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

**Explosive precursors** : Not applicable.

**(EC) No 273/2004 on drug precursors**

Not listed.

**(EC) No 111/2005 Trade between the Union and third countries in drug precursors**

Not listed.

**Ozone depleting substances (EU 2024/590)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria**

| Category |
|---|
| P5c |

**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
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]**

| Classification | Justification |
|---|---|
| Flam. Liq. 3, H226 | On basis of test data |
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2, H319 | Calculation method |
| STOT RE 2, H373 | Calculation method |

**Full text of abbreviated H statements**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| 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. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

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

| | |
|---|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Aquatic Chronic 4 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4 |
| Asp. Tox. 1 | ASPIRATION HAZARD - 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 Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1B | SKIN SENSITISATION - Category 1B |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

**Date of issue/ Date of revision** : 16/11/2026

**Date of previous issue** : No previous validation

**Version** : 1

TEKNODUR HBS 7-00 (EMAPUR HBS 7-00)_RAL RAL 9016
9016

**Notice to reader**

## SECTION 16: Other information

**The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.**