



DRIVING SURFACE PERFECTION

# MAXIMUM FAST HARDENER

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Product Reference code: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
SDS Ref. (EU): MXMFH-SDS  
Issue date: 28/09/2022 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : MAXIMUM FAST HARDENER  
Product code : MXMFH/25  
Type of product : Hardener  
Product group : 2K Hardener

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Coatings and paints, thinners, paint removers  
Function or use category : Hardener (Crosslinker)

##### 1.2.2. Uses advised against

Restrictions on use : Consumer uses: Private households (= general public = consumers)

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

##### Manufacturer

U-POL Limited Ltd  
Denington Road  
GB- NN8 2QH Wellingborough – Northamptonshire  
United Kingdom  
T +44 (0) 1933 230310  
[technicalsupport@u-pol.com](mailto:technicalsupport@u-pol.com) - [www.u-pol.com](http://www.u-pol.com)

##### Importer

U-POL Netherlands B.V. B.V.  
Hoogoorddreef 15  
NL- 1101BA Amsterdam  
Netherlands  
T +31 20 240 2216  
[technicalsupport@u-pol.com](mailto:technicalsupport@u-pol.com) - [www.u-pol.com](http://www.u-pol.com)

#### 1.4. Emergency telephone number

| Country        | Organisation/Company                                     | Address                                  | Emergency number   | Comment   |
|----------------|--|--|--|---|
| Ireland        | National Poisons Information Centre<br>Beaumont Hospital | PO Box 1297<br>Beaumont Road<br>9 Dublin | +353 1 809 2566<br>(Healthcare professionals-<br>24/7)<br>+353 1 809 2166 (public,<br>8am - 10pm, 7/7) |   |
| United Kingdom | NHS<br>England, Scotland & Wales                         | -  | Call 111 or a Doctor   | In Northern Ireland,<br>contact your local GP<br>or pharmacist during<br>normal hours<br>( <a href="http://www.gpoutofhours.hscni.net">www.gpoutofhours.hscni.net</a> ) |

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226  
Acute toxicity (inhalation:vapour) Category 4 H332  
Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Skin sensitisation, Category 1 H317  
Specific target organ toxicity — Single exposure, Category 3, Narcosis H336

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Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335  
Specific target organ toxicity — Repeated exposure, Category 2 H373  
Aspiration hazard, Category 1 H304  
Full text of H- and EUH-statements: see section 16

### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May be fatal if swallowed and enters airways.

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger  
Contains : n-butyl acetate, solvent naphtha (petroleum), light aromatic, hexamethylene diisocyanate oligomers, Xylene, ethylbenzene  
Hazard statements (CLP) : H226 - Flammable liquid and vapour.  
H304 - May be fatal if swallowed and enters airways.  
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.  
Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
Avoid breathing fume, vapours, spray.  
P280 - Wear face protection, protective clothing, protective gloves.  
P301+P310 - IF SWALLOWED: Immediately call a doctor.  
P331 - Do NOT induce vomiting.  
P403+P235 - Store in a well-ventilated place. Keep cool.

## 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name  | Product identifier   | %    | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|------|---|
| n-butyl acetate substance with a Community workplace exposure limit | CAS-No.: 123-86-4<br>EC-No.: 204-658-1<br>EC Index-No.: 607-025-00-1<br>REACH-no: 01-2119485493-29 | < 50 | Flam. Liq. 3, H226<br>STOT SE 3, H336                           |

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| Name   | Product identifier   | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
|--|--|---------|--|
| hexamethylene diisocyanate oligomers                                   | CAS-No.: 28182-81-2<br>EC-No.: 500-060-2<br>REACH-no: 01-2119485796-17                               | < 50    | Acute Tox. 4 (Inhalation:vapour), H332<br>Skin Sens. 1, H317<br>STOT SE 3, H335  |
| Xylene<br>substance with a Community workplace exposure limit (Note C) | CAS-No.: 1330-20-7<br>EC-No.: 215-535-7<br>EC Index-No.: 601-022-00-9<br>REACH-no: 01-2119488216-32  | 20 – 25 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Asp. Tox. 1, H304 |
| ethylbenzene<br>substance with a Community workplace exposure limit    | CAS-No.: 100-41-4<br>EC-No.: 202-849-4<br>EC Index-No.: 601-023-00-4<br>REACH-no: 01-2119489370-35   | 5 – 10  | Flam. Liq. 2, H225<br>Acute Tox. 4 (Inhalation), H332<br>STOT RE 2, H373<br>Asp. Tox. 1, H304  |
| solvent naphtha (petroleum), light aromatic (Note H)(Note 5)(Note P)   | CAS-No.: 64742-95-6<br>EC-No.: 265-199-0<br>EC Index-No.: 649-356-00-4<br>REACH-no: 01-2119455851-35 | < 2.5   | Flam. Liq. 3, H226<br>STOT SE 3, H336<br>STOT SE 3, H335<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411   |

Note 5 : The concentration limits for gaseous mixtures are expressed as volume per volume percentage.

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note H : The classification and labelling shown for this substance applies to the hazardous property(ies) indicated by the hazard statement(s) in combination with the hazard class(es) and category(ies) shown. The requirements of Article 4 for manufacturers, importers or downstream users of this substance apply to all other hazard classes and categories. For hazard classes where the route of exposure or the nature of the effects leads to a differentiation of the classification of the hazard class, the manufacturer, importer or downstream user is required to consider the routes of exposure or the nature of the effects not already considered.

Note P: The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102)-P260-P262-P301 + P310-P331 shall apply.

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Call a physician immediately.  |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.  |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.                                 |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Do not induce vomiting. Call a physician immediately.  |

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

|                                     |  |
|-------------------------------------|--|
| Symptoms/effects                    | : May cause drowsiness or dizziness.   |
| Symptoms/effects after inhalation   | : May cause respiratory irritation.  |
| Symptoms/effects after skin contact | : Irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking. |

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Symptoms/effects after eye contact : Eye irritation.  
Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

Fire hazard : Flammable liquid and vapour.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe fume, spray, vapours. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe fume, spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.  
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| n-butyl acetate (123-86-4)                                |                                       |
|---|---------------------------------------|
| <b>EU - Indicative Occupational Exposure Limit (IOEL)</b> |                                       |
| Local name  | n-Butyl acetate                       |
| IOEL TWA  | 241 mg/m <sup>3</sup>                 |
| IOEL TWA [ppm]  | 50 ppm                                |
| IOEL STEL   | 723 mg/m <sup>3</sup>                 |
| IOEL STEL [ppm]   | 150 ppm                               |
| Regulatory reference                                      | COMMISSION DIRECTIVE (EU) 2019/1831   |
| <b>Ireland - Occupational Exposure Limits</b>             |                                       |
| Local name  | Butyl acetate                         |
| OEL TWA [1]   | 710 mg/m <sup>3</sup>                 |
| OEL TWA [2]   | 150 ppm                               |
| OEL STEL  | 950 mg/m <sup>3</sup>                 |
| OEL STEL [ppm]  | 200 ppm                               |
| Regulatory reference                                      | Chemical Agents Code of Practice 2020 |
| <b>United Kingdom - Occupational Exposure Limits</b>      |                                       |
| Local name  | Butyl acetate                         |
| WEL TWA (OEL TWA) [1]                                     | 724 mg/m <sup>3</sup>                 |
| WEL TWA (OEL TWA) [2]                                     | 150 ppm                               |
| WEL STEL (OEL STEL)                                       | 966 mg/m <sup>3</sup>                 |
| WEL STEL (OEL STEL) [ppm]                                 | 200 ppm                               |
| Regulatory reference                                      | EH40/2005 (Fourth edition, 2020). HSE |
| <b>Xylene (1330-20-7)</b>                                 |                                       |
| <b>EU - Indicative Occupational Exposure Limit (IOEL)</b> |                                       |
| Local name  | Xylene, mixed isomers, pure           |
| IOEL TWA  | 221 mg/m <sup>3</sup>                 |
| IOEL TWA [ppm]  | 50 ppm                                |
| IOEL STEL   | 442 mg/m <sup>3</sup>                 |
| IOEL STEL [ppm]   | 100 ppm                               |
| Remark  | Skin                                  |

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| <b>Xylene (1330-20-7)</b>                                 |  |
|---|--|
| Regulatory reference                                      | COMMISSION DIRECTIVE 2000/39/EC  |
| <b>Ireland - Occupational Exposure Limits</b>             |  |
| Local name  | Xylene, mixed isomers  |
| OEL TWA [1]   | 221 mg/m <sup>3</sup>  |
| OEL TWA [2]   | 50 ppm   |
| OEL STEL  | 442 mg/m <sup>3</sup>  |
| OEL STEL [ppm]  | 100 ppm  |
| Remark  | Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values) |
| Regulatory reference                                      | Chemical Agents Code of Practice 2020  |
| <b>Ireland - Biological limit values</b>                  |  |
| Local name  | Xylene   |
| BLV   | 1.5 g/g creatinine Parameter: methylhippuric acids - Medium: urine - Sampling time: End of Shift   |
| Regulatory reference                                      | Biological Monitoring Guidelines (HSA, 2011)   |
| <b>United Kingdom - Occupational Exposure Limits</b>      |  |
| Local name  | Xylene   |
| WEL TWA (OEL TWA) [1]                                     | 220 mg/m <sup>3</sup>  |
| WEL TWA (OEL TWA) [2]                                     | 50 ppm   |
| WEL STEL (OEL STEL)                                       | 441 mg/m <sup>3</sup>  |
| WEL STEL (OEL STEL) [ppm]                                 | 100 ppm  |
| Remark  | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)                              |
| Regulatory reference                                      | EH40/2005 (Fourth edition, 2020). HSE  |
| <b>United Kingdom - Biological limit values</b>           |  |
| Local name  | Xylene, o-, m-, p- or mixed isomers  |
| BMGV  | 650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift  |
| Regulatory reference                                      | EH40/2005 (Fourth edition, 2020). HSE  |
| <b>ethylbenzene (100-41-4)</b>                            |  |
| <b>EU - Indicative Occupational Exposure Limit (IOEL)</b> |  |
| Local name  | Ethylbenzene   |
| IOEL TWA  | 442 mg/m <sup>3</sup>  |
| IOEL TWA [ppm]  | 100 ppm  |
| IOEL STEL   | 884 mg/m <sup>3</sup>  |
| IOEL STEL [ppm]   | 200 ppm  |
| Remark  | Skin   |
| Regulatory reference                                      | COMMISSION DIRECTIVE 2000/39/EC  |

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| ethylbenzene (100-41-4)                              |   |
|--|---|
| <b>Ireland - Occupational Exposure Limits</b>        |   |
| Local name   | Ethylbenzene  |
| OEL TWA [1]  | 442 mg/m <sup>3</sup>   |
| OEL TWA [2]  | 100 ppm   |
| OEL STEL   | 884 mg/m <sup>3</sup>   |
| OEL STEL [ppm]                                       | 200 ppm   |
| Remark   | Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)  |
| Regulatory reference                                 | Chemical Agents Code of Practice 2020   |
| <b>Ireland - Biological limit values</b>             |   |
| Local name   | Ethyl benzene   |
| BLV  | 0.7 g/g creatinine Parameter: mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: End of shift at end of workweek - Notations: Ns (Non-specific), Sq (Semi-quantitative)<br>Parameter: ethylbenzene - Medium: end-exhaled air - Sampling time: Not critical - Notations: Sq (Semi-quantitative) |
| Regulatory reference                                 | Biological Monitoring Guidelines (HSA, 2011)  |
| <b>United Kingdom - Occupational Exposure Limits</b> |   |
| Local name   | Ethylbenzene  |
| WEL TWA (OEL TWA) [1]                                | 441 mg/m <sup>3</sup>   |
| WEL TWA (OEL TWA) [2]                                | 100 ppm   |
| WEL STEL (OEL STEL)                                  | 552 mg/m <sup>3</sup>   |
| WEL STEL (OEL STEL) [ppm]                            | 125 ppm   |
| Remark   | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)   |
| Regulatory reference                                 | EH40/2005 (Fourth edition, 2020). HSE   |

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

| n-butyl acetate (123-86-4)               |                       |
|--|-----------------------|
| <b>DNEL/DMEL (Workers)</b>               |                       |
| Acute - systemic effects, dermal         | 11 mg/kg bw/day       |
| Acute - systemic effects, inhalation     | 600 mg/m <sup>3</sup> |
| Acute - local effects, inhalation        | 600 mg/m <sup>3</sup> |
| Long-term - systemic effects, dermal     | 11 mg/kg bw/day       |
| Long-term - systemic effects, inhalation | 300 mg/m <sup>3</sup> |
| Long-term - local effects, inhalation    | 300 mg/m <sup>3</sup> |

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| <b>n-butyl acetate (123-86-4)</b>                               |                         |
|---|-------------------------|
| <b>DNEL/DMEL (General population)</b>                           |                         |
| Acute - systemic effects, dermal                                | 6 mg/kg bw/day          |
| Acute - systemic effects, inhalation                            | 300 mg/m <sup>3</sup>   |
| Acute - systemic effects, oral                                  | 2 mg/kg bw/day          |
| Acute - local effects, inhalation                               | 300 mg/m <sup>3</sup>   |
| Long-term - systemic effects, oral                              | 2 mg/kg bw/day          |
| Long-term - systemic effects, inhalation                        | 35.7 mg/m <sup>3</sup>  |
| Long-term - systemic effects, dermal                            | 6 mg/kg bw/day          |
| Long-term - local effects, inhalation                           | 35.7 mg/m <sup>3</sup>  |
| <b>PNEC (Water)</b>   |                         |
| PNEC aqua (freshwater)  | 0.18 mg/l               |
| PNEC aqua (marine water)  | 0.018 mg/l              |
| PNEC aqua (intermittent, freshwater)                            | 0.36 mg/l               |
| <b>PNEC (Sediment)</b>  |                         |
| PNEC sediment (freshwater)                                      | 0.981 mg/kg dwt         |
| PNEC sediment (marine water)                                    | 0.0981 mg/kg dwt        |
| <b>PNEC (Soil)</b>  |                         |
| PNEC soil   | 0.0903 mg/kg dwt        |
| <b>PNEC (STP)</b>   |                         |
| PNEC sewage treatment plant                                     | 35.6 mg/l               |
| <b>solvent naphtha (petroleum), light aromatic (64742-95-6)</b> |                         |
| <b>DNEL/DMEL (Workers)</b>                                      |                         |
| Long-term - systemic effects, dermal                            | 25 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation                        | 150 mg/m <sup>3</sup>   |
| <b>DNEL/DMEL (General population)</b>                           |                         |
| Long-term - systemic effects, oral                              | 11 mg/kg bodyweight/day |
| Long-term - systemic effects, dermal                            | 11 mg/kg bodyweight/day |
| <b>hexamethylene diisocyanate oligomers (28182-81-2)</b>        |                         |
| <b>DNEL/DMEL (Workers)</b>                                      |                         |
| Acute - local effects, inhalation                               | 0.5                     |
| Long-term - local effects, inhalation                           | 1 mg/m <sup>3</sup>     |
| <b>PNEC (Water)</b>   |                         |
| PNEC aqua (freshwater)  | 0.127 mg/l              |
| PNEC aqua (marine water)  | 0.0127 mg/l             |
| <b>PNEC (Sediment)</b>  |                         |
| PNEC sediment (freshwater)                                      | 266701 mg/kg dwt        |
| PNEC sediment (marine water)                                    | 26670 mg/kg dwt         |



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| <b>hexamethylene diisocyanate oligomers (28182-81-2)</b> |                          |
|--|--------------------------|
| <b>PNEC (Soil)</b>                                       |                          |
| PNEC soil  | 53183 mg/kg dwt          |
| <b>PNEC (STP)</b>  |                          |
| PNEC sewage treatment plant                              | 88 mg/l                  |
| <b>Xylene (1330-20-7)</b>                                |                          |
| <b>DNEL/DMEL (Workers)</b>                               |                          |
| Acute - systemic effects, inhalation                     | 289 mg/m <sup>3</sup>    |
| Acute - local effects, inhalation                        | 289 mg/m <sup>3</sup>    |
| Long-term - systemic effects, dermal                     | 180 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation                 | 77 mg/m <sup>3</sup>     |
| Long-term - local effects, inhalation                    | 77 mg/m <sup>3</sup>     |
| <b>DNEL/DMEL (General population)</b>                    |                          |
| Acute - systemic effects, inhalation                     | 174 mg/m <sup>3</sup>    |
| Acute - local effects, inhalation                        | 174 mg/m <sup>3</sup>    |
| Long-term - systemic effects, oral                       | 1.6 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation                 | 14.8 mg/m <sup>3</sup>   |
| Long-term - systemic effects, dermal                     | 108 mg/kg bodyweight/day |
| Long-term - local effects, inhalation                    | 65.3 mg/m <sup>3</sup>   |
| <b>PNEC (Water)</b>                                      |                          |
| PNEC aqua (freshwater)                                   | 0.327 mg/l               |
| PNEC aqua (marine water)                                 | 0.327 mg/l               |
| PNEC aqua (intermittent, freshwater)                     | 0.327 mg/l               |
| <b>PNEC (Sediment)</b>                                   |                          |
| PNEC sediment (freshwater)                               | 12.46 mg/kg dwt          |
| PNEC sediment (marine water)                             | 12.46 mg/kg dwt          |
| <b>PNEC (Soil)</b>                                       |                          |
| PNEC soil  | 2.31 mg/kg dwt           |
| <b>PNEC (STP)</b>  |                          |
| PNEC sewage treatment plant                              | 6.58 mg/l                |
| <b>ethylbenzene (100-41-4)</b>                           |                          |
| <b>DNEL/DMEL (Workers)</b>                               |                          |
| Acute - local effects, inhalation                        | 293 mg/m <sup>3</sup>    |
| Long-term - systemic effects, dermal                     | 180 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation                 | 77 mg/m <sup>3</sup>     |
| <b>DNEL/DMEL (General population)</b>                    |                          |
| Long-term - systemic effects, oral                       | 1.6 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation                 | 15 mg/m <sup>3</sup>     |

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| ethylbenzene (100-41-4)              |                |
|--------------------------------------|----------------|
| <b>PNEC (Water)</b>                  |                |
| PNEC aqua (freshwater)               | 0.1 mg/l       |
| PNEC aqua (marine water)             | 0.01 mg/l      |
| PNEC aqua (intermittent, freshwater) | 0.1 mg/l       |
| <b>PNEC (Sediment)</b>               |                |
| PNEC sediment (freshwater)           | 13.7 mg/kg dwt |
| PNEC sediment (marine water)         | 1.37 mg/kg dwt |
| <b>PNEC (Soil)</b>                   |                |
| PNEC soil                            | 2.68 mg/kg dwt |
| <b>PNEC (Oral)</b>                   |                |
| PNEC oral (secondary poisoning)      | 0.02 g/kg food |
| <b>PNEC (STP)</b>                    |                |
| PNEC sewage treatment plant          | 9.6 mg/l       |

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

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### SECTION 9: Physical and chemical properties

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

|   |                            |
|---|----------------------------|
| Physical state                                  | : Liquid                   |
| Appearance                                      | : Clear, colorless liquid. |
| Colour  | : Colourless.              |
| Odour   | : Fruity.                  |
| Odour threshold                                 | : No data available        |
| pH  | : No data available        |
| Relative evaporation rate (butylacetate=1)      | : No data available        |
| Melting point                                   | : No data available        |
| Freezing point                                  | : No data available        |
| Boiling point                                   | : 140 °C                   |
| Flash point                                     | : 25 °C                    |
| Auto-ignition temperature                       | : No data available        |
| Decomposition temperature                       | : No data available        |
| Flammability (solid, gas)                       | : No data available        |
| Vapour pressure                                 | : No data available        |
| Relative vapour density at 20 °C                | : No data available        |
| Relative density                                | : No data available        |
| Density   | : 0.95 g/cm <sup>3</sup>   |
| Solubility                                      | : No data available        |
| Partition coefficient n-octanol/water (Log Pow) | : No data available        |
| Viscosity, kinematic                            | : No data available        |
| Viscosity, dynamic                              | : No data available        |
| Explosive properties                            | : No data available        |
| Oxidising properties                            | : No data available        |
| Explosive limits                                | :                          |

#### 9.2. Other information

VOC content : 654

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

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

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Harmful if inhaled.

| <b>MAXIMUM FAST HARDENER</b>                                    |   |
|---|---|
| ATE CLP (vapours)   | 17.334 mg/l/4h  |
| <b>hexamethylene-di-isocyanate (822-06-0)</b>                   |   |
| LD50 oral rat   | 746 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))   |
| LD50 dermal rat   | > 7000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)  |
| LC50 Inhalation - Rat   | 0.124 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 111 - 140                              |
| <b>n-butyl acetate (123-86-4)</b>                               |   |
| LD50 oral rat   | 10760 – 12789 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral, 14 day(s))           |
| LD50 dermal rabbit  | > 14112 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))            |
| LC50 Inhalation - Rat   | 23.4 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat)   |
| LC50 Inhalation - Rat [ppm]                                     | 390 ppm/4h  |
| LC50 Inhalation - Rat (Vapours)                                 | > 21 mg/l/4h (4 h, OECD Test Guideline 403, rat, vapours)   |
| <b>solvent naphtha (petroleum), light aromatic (64742-95-6)</b> |   |
| LD50 oral rat   | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)  |
| LD50 dermal rabbit  | > 3160 mg/kg (OECD Test Guideline 402)  |
| LC50 Inhalation - Rat (Vapours)                                 | > 6.193 mg/l/4h (4 h, OECD Test Guideline 403, vapours)   |
| <b>hexamethylene diisocyanate oligomers (28182-81-2)</b>        |   |
| LD50 oral rat   | > 2500 mg/kg (OECD Test Guideline 423, rat, female)   |
| LD50 dermal rat   | > 2000 mg/kg (OECD Test Guideline 402, rat, male/female)  |
| LC50 Inhalation - Rat (Dust/Mist)                               | 0.39 mg/l/4h (OECD Test Guideline 403, rat, female, inhalation, dust/mist)  |
| <b>Xylene (1330-20-7)</b>                                       |   |
| LD50 oral rat   | 3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rat   | 12126 mg/kg (Non-GLP, read-across from supporting substance, single dermal dose under occlusion followed by observation for 14 days)  |
| LD50 dermal rabbit  | 12126 mg/kg bodyweight Animal: rabbit, Animal sex: male   |
| LC50 Inhalation - Rat [ppm]                                     | 6700 ppm/4h (EU Method B.2 (Acute Toxicity (Inhalation)), 4h, rat, male)  |
| <b>ethylbenzene (100-41-4)</b>                                  |   |
| LD50 oral rat   | 3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))  |
| LD50 dermal rabbit  | 15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)   |
| LC50 Inhalation - Rat   | 17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))  |

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| <b>dibutyltin dilaurate (77-58-7)</b>                           |   |
|---|---|
| LD50 oral rat   | 2071 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1207 - 5106   |
| LD50 dermal rat   | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))                                    |
| Skin corrosion/irritation                                       | : Causes skin irritation.   |
| Serious eye damage/irritation                                   | : Causes serious eye irritation.  |
| Respiratory or skin sensitisation                               | : May cause an allergic skin reaction.  |
| Germ cell mutagenicity  | : Not classified  |
| Carcinogenicity   | : Not classified  |
| <b>Xylene (1330-20-7)</b>                                       |   |
| IARC group  | 3 - Not classifiable  |
| <b>ethylbenzene (100-41-4)</b>                                  |   |
| IARC group  | 2B - Possibly carcinogenic to humans  |
| Reproductive toxicity   | : Not classified  |
| <b>dibutyltin dilaurate (77-58-7)</b>                           |   |
| NOAEL (animal/male, F0/P)                                       | 1.9 – 2.3 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)                                    |
| NOAEL (animal/female, F0/P)                                     | 1.7 – 2.4 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)                                  |
| STOT-single exposure  | : May cause drowsiness or dizziness. May cause respiratory irritation.  |
| <b>hexamethylene-di-isocyanate (822-06-0)</b>                   |   |
| STOT-single exposure  | May cause respiratory irritation.   |
| <b>n-butyl acetate (123-86-4)</b>                               |   |
| STOT-single exposure  | May cause drowsiness or dizziness.  |
| <b>solvent naphtha (petroleum), light aromatic (64742-95-6)</b> |   |
| STOT-single exposure  | May cause drowsiness or dizziness. May cause respiratory irritation.  |
| <b>hexamethylene diisocyanate oligomers (28182-81-2)</b>        |   |
| STOT-single exposure  | May cause respiratory irritation.   |
| <b>Xylene (1330-20-7)</b>                                       |   |
| STOT-single exposure  | May cause respiratory irritation.   |
| <b>dibutyltin dilaurate (77-58-7)</b>                           |   |
| STOT-single exposure  | Causes damage to organs (thymus).   |
| STOT-repeated exposure  | : May cause damage to organs through prolonged or repeated exposure.  |
| <b>Xylene (1330-20-7)</b>                                       |   |
| LOAEL (oral, rat, 90 days)                                      | 150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity) |
| STOT-repeated exposure  | May cause damage to organs through prolonged or repeated exposure.  |
| <b>ethylbenzene (100-41-4)</b>                                  |   |
| NOAEL (oral, rat, 90 days)                                      | 75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)  |
| STOT-repeated exposure  | May cause damage to organs (hearing sense) through prolonged or repeated exposure.  |

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### dibutyltin dilaurate (77-58-7)

STOT-repeated exposure Causes damage to organs (thymus) through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

### n-butyl acetate (123-86-4)

|                        |  |
|------------------------|--|
| LC50 - Fish [1]        | 18 mg/l Test organisms (species): Pimephales promelas  |
| LC50 - Fish [2]        | 62 mg/l (Leuciscus idus, static system)  |
| EC50 - Crustacea [1]   | 44 mg/l Test organisms (species): Daphnia sp.  |
| ErC50 algae            | 397 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP) |
| NOEC (chronic)         | 23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'   |
| NOEC chronic crustacea | 23 mg/l  |

### Xylene (1330-20-7)

|                      |  |
|----------------------|--|
| LC50 - Fish [1]      | 2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)  |
| EC50 - Crustacea [1] | > 3.4 mg/l Test organisms (species): Ceriodaphnia dubia  |
| EC50 72h - Algae [1] | 2.2 mg/l   |
| ErC50 algae          | 4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) |
| NOEC chronic fish    | > 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'                                     |

### ethylbenzene (100-41-4)

|                      |  |
|----------------------|--|
| LC50 - Fish [1]      | 5.1 mg/l Test organisms (species): Menidia menidia   |
| EC50 - Crustacea [1] | 1.8 – 2.4 mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)   |
| EC50 72h - Algae [1] | 4.9 mg/l Test organisms (species): Skeletonema costatum  |
| EC50 72h - Algae [2] | 5.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 96h - Algae [1] | 7.7 mg/l Test organisms (species): Skeletonema costatum  |
| EC50 96h - Algae [2] | 3.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| LOEC (chronic)       | 1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'  |
| NOEC (chronic)       | 0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'   |

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### 12.2. Persistence and degradability

#### n-butyl acetate (123-86-4)

|                               |                                    |
|-------------------------------|------------------------------------|
| Persistence and degradability | Readily biodegradable in water.    |
| ThOD                          | 2.21 g O <sub>2</sub> /g substance |
| BOD (% of ThOD)               | 0.46                               |

#### solvent naphtha (petroleum), light aromatic (64742-95-6)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
|-------------------------------|---|

#### Xylene (1330-20-7)

|                               |  |
|-------------------------------|--|
| Persistence and degradability | Biodegradable in the soil. Readily biodegradable in water. |
|-------------------------------|--|

#### ethylbenzene (100-41-4)

|                                 |  |
|---------------------------------|--|
| Persistence and degradability   | Biodegradable in the soil. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 1.44 g O <sub>2</sub> /g substance                         |
| Chemical oxygen demand (COD)    | 2.1 g O <sub>2</sub> /g substance                          |
| ThOD                            | 3.17 g O <sub>2</sub> /g substance                         |

### 12.3. Bioaccumulative potential

#### n-butyl acetate (123-86-4)

|   |   |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) |
| Bioaccumulative potential                       | Low potential for bioaccumulation (Log Kow < 4).  |

#### solvent naphtha (petroleum), light aromatic (64742-95-6)

|   |                  |
|---|------------------|
| Partition coefficient n-octanol/water (Log Pow) | 2.1 – 6          |
| Bioaccumulative potential                       | Not established. |

#### Xylene (1330-20-7)

|   |  |
|---|--|
| BCF - Fish [1]                                  | 7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across) |
| Partition coefficient n-octanol/water (Log Pow) | 3.2 (Read-across, 20 °C)   |
| Bioaccumulative potential                       | Low potential for bioaccumulation (BCF < 500).   |

#### ethylbenzene (100-41-4)

|   |  |
|---|--|
| BCF - Fish [1]                                  | 1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value) |
| Partition coefficient n-octanol/water (Log Pow) | 3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)                    |
| Bioaccumulative potential                       | Low potential for bioaccumulation (BCF < 500).   |

### 12.4. Mobility in soil

#### n-butyl acetate (123-86-4)

|  |  |
|--|--|
| Surface tension  | 61.3 mN/m (20 °C, 0.1 %, OECD 115: Surface Tension of Aqueous Solutions) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 1.268 – 1.844 (log Koc, SRC PCKOCWIN v2.0, Calculated value)             |
| Ecology - soil   | Highly mobile in soil.   |

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| Xylene (1330-20-7)   |   |
|--|---|
| Surface tension  | 28.01 – 29.76 mN/m (25 °C)  |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)                                      |
| Ecology - soil   | Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation. |

| ethylbenzene (100-41-4)                                    |  |
|--|--|
| Surface tension  | 71.2 mN/m (23 °C, 0.058 g/l, EU Method A.5: Surface tension)   |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.71 (log Koc, PCKOCWIN v1.66, QSAR)                           |
| Ecology - soil   | Low potential for adsorption in soil. Toxic to soil organisms. |

### 12.5. Results of PBT and vPvB assessment

| Component                  |   |
|----------------------------|---|
| n-butyl acetate (123-86-4) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Xylene (1330-20-7)         | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| ethylbenzene (100-41-4)    | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1 UN number

UN-No. (ADR) : UN 1263  
UN-No. (IMDG) : UN 1263  
UN-No. (IATA) : UN 1263  
UN-No. (ADN) : UN 1263  
UN-No. (RID) : UN 1263

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : PAINT RELATED MATERIAL  
Proper Shipping Name (IMDG) : PAINT RELATED MATERIAL  
Proper Shipping Name (IATA) : Paint  
Proper Shipping Name (ADN) : PAINT RELATED MATERIAL  
Proper Shipping Name (RID) : PAINT RELATED MATERIAL  
Transport document description (ADR) : UN 1263 PAINT RELATED MATERIAL, 3, III, (D/E)  
Transport document description (IMDG) : UN 1263 PAINT RELATED MATERIAL, 3, III  
Transport document description (IATA) : UN 1263 Paint, 3, III  
Transport document description (ADN) : UN 1263 PAINT RELATED MATERIAL, 3, III



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Transport document description (RID) : UN 1263 PAINT RELATED MATERIAL, 3, III

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 3

Danger labels (ADR) : 3



#### IMDG

Transport hazard class(es) (IMDG) : 3

Danger labels (IMDG) : 3



#### IATA

Transport hazard class(es) (IATA) : 3

Danger labels (IATA) : 3



#### ADN

Transport hazard class(es) (ADN) : 3

Danger labels (ADN) : 3



#### RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3



### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available



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### 14.6. Special precautions for user

#### Overland transport

|   |  |
|---|--|
| Classification code (ADR)                                 | : F1   |
| Special provisions (ADR)                                  | : 163, 367, 650  |
| Limited quantities (ADR)                                  | : 5I   |
| Excepted quantities (ADR)                                 | : E1   |
| Packing instructions (ADR)                                | : P001, IBC03, LP01, R001  |
| Special packing provisions (ADR)                          | : PP1  |
| Mixed packing provisions (ADR)                            | : MP19   |
| Portable tank and bulk container instructions (ADR)       | : T2   |
| Portable tank and bulk container special provisions (ADR) | : TP1, TP29  |
| Tank code (ADR)   | : LGBF   |
| Vehicle for tank carriage                                 | : FL   |
| Transport category (ADR)                                  | : 3  |
| Special provisions for carriage - Packages (ADR)          | : V12  |
| Special provisions for carriage - Operation (ADR)         | : S2   |
| Hazard identification number (Kemler No.)                 | : 30   |
| Orange plates   | : <br> |
| Tunnel restriction code (ADR)                             | : D/E  |
| EAC code  | : •3Y  |

#### Transport by sea

|                                    |  |
|------------------------------------|--|
| Special provisions (IMDG)          | : 163, 223, 367, 955                                   |
| Limited quantities (IMDG)          | : 5 L  |
| Excepted quantities (IMDG)         | : E1   |
| Packing instructions (IMDG)        | : P001, LP01   |
| Special packing provisions (IMDG)  | : PP1  |
| IBC packing instructions (IMDG)    | : IBC03  |
| Tank instructions (IMDG)           | : T2   |
| Tank special provisions (IMDG)     | : TP1, TP29  |
| EmS-No. (Fire)                     | : F-E  |
| EmS-No. (Spillage)                 | : S-E  |
| Stowage category (IMDG)            | : A  |
| Properties and observations (IMDG) | : Miscibility with water depends upon the composition. |

#### Air transport

|  |                 |
|--|-----------------|
| PCA Excepted quantities (IATA)               | : E1            |
| PCA Limited quantities (IATA)                | : Y344          |
| PCA limited quantity max net quantity (IATA) | : 10L           |
| PCA packing instructions (IATA)              | : 355           |
| PCA max net quantity (IATA)                  | : 60L           |
| CAO packing instructions (IATA)              | : 366           |
| CAO max net quantity (IATA)                  | : 220L          |
| Special provisions (IATA)                    | : A3, A72, A192 |
| ERG code (IATA)                              | : 3L            |

#### Inland waterway transport

|                                   |                 |
|-----------------------------------|-----------------|
| Classification code (ADN)         | : F1            |
| Special provisions (ADN)          | : 163, 367, 650 |
| Limited quantities (ADN)          | : 5 L           |
| Excepted quantities (ADN)         | : E1            |
| Equipment required (ADN)          | : PP, EX, A     |
| Ventilation (ADN)                 | : VE01          |
| Number of blue cones/lights (ADN) | : 0             |

#### Rail transport

|                           |      |
|---------------------------|------|
| Classification code (RID) | : F1 |
|---------------------------|------|

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|   |                           |
|---|---------------------------|
| Special provisions (RID)                                  | : 163, 367, 650           |
| Limited quantities (RID)                                  | : 5L                      |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P001, IBC03, LP01, R001 |
| Special packing provisions (RID)                          | : PP1                     |
| Mixed packing provisions (RID)                            | : MP19                    |
| Portable tank and bulk container instructions (RID)       | : T2                      |
| Portable tank and bulk container special provisions (RID) | : TP1, TP29               |
| Tank codes for RID tanks (RID)                            | : LGBF                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Packages (RID)          | : W12                     |
| Colis express (express parcels) (RID)                     | : CE4                     |
| Hazard identification number (RID)                        | : 30                      |

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

| EU restriction list (REACH Annex XVII) |  |  |
|--|--|--|
| Reference code                         | Applicable on  | Entry title or description   |
| 3(a)                                   | MAXIMUM FAST HARDENER ; n-butyl acetate ; solvent naphtha (petroleum), light aromatic ; Xylene ; ethylbenzene  | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F   |
| 3(b)                                   | MAXIMUM FAST HARDENER ; n-butyl acetate ; solvent naphtha (petroleum), light aromatic ; hexamethylene diisocyanate oligomers ; Xylene ; ethylbenzene | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10  |
| 3(c)                                   | solvent naphtha (petroleum), light aromatic  | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1  |
| 40.                                    | n-butyl acetate ; solvent naphtha (petroleum), light aromatic ; Xylene ; ethylbenzene  | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : 654

#### 15.1.2. National regulations

No additional information available

# MAXIMUM FAST HARDENER

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

#### Abbreviations and acronyms:

|         |   |
|---------|---|
| ADN     | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR     | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE     | Acute Toxicity Estimate   |
| BCF     | Bioconcentration factor   |
| BLV     | Biological limit value  |
| BOD     | Biochemical oxygen demand (BOD)   |
| COD     | Chemical oxygen demand (COD)  |
| DMEL    | Derived Minimal Effect level  |
| DNEL    | Derived-No Effect Level   |
| EC-No.  | European Community number   |
| EC50    | Median effective concentration  |
| EN      | European Standard   |
| IARC    | International Agency for Research on Cancer   |
| IATA    | International Air Transport Association   |
| IMDG    | International Maritime Dangerous Goods  |
| LC50    | Median lethal concentration   |
| LD50    | Median lethal dose  |
| LOAEL   | Lowest Observed Adverse Effect Level  |
| NOAEC   | No-Observed Adverse Effect Concentration  |
| NOAEL   | No-Observed Adverse Effect Level  |
| NOEC    | No-Observed Effect Concentration  |
| OECD    | Organisation for Economic Co-operation and Development  |
| OEL     | Occupational Exposure Limit   |
| PBT     | Persistent Bioaccumulative Toxic  |
| PNEC    | Predicted No-Effect Concentration   |
| RID     | Regulations concerning the International Carriage of Dangerous Goods by Rail                    |
| SDS     | Safety Data Sheet   |
| STP     | Sewage treatment plant  |
| ThOD    | Theoretical oxygen demand (ThOD)  |
| TLM     | Median Tolerance Limit  |
| VOC     | Volatile Organic Compounds  |
| CAS-No. | Chemical Abstract Service number  |
| N.O.S.  | Not Otherwise Specified   |
| vPvB    | Very Persistent and Very Bioaccumulative  |
| ED      | Endocrine disrupting properties   |

# MAXIMUM FAST HARDENER

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| Full text of H- and EUH-statements: |  |
|-------------------------------------|--|
| Acute Tox. 4 (Dermal)               | Acute toxicity (dermal), Category 4                                    |
| Acute Tox. 4 (Inhalation)           | Acute toxicity (inhal.), Category 4                                    |
| Acute Tox. 4 (Inhalation:vapour)    | Acute toxicity (inhalation:vapour) Category 4                          |
| Aquatic Chronic 2                   | Hazardous to the aquatic environment — Chronic Hazard, Category 2      |
| 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  |
| 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.     |
| H411                                | Toxic to aquatic life with long lasting effects.                       |
| 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, Narcosis |

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