

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 25-Aug-2021

Revision Number: 1

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

1.1. Product identifier

Product Name: Kluthe KS 2 RAL 5010
Article number: 021210335010

Hazard components for labeling: Contains n-Butyl acetate, Bisphenol A diglycidyl ether, Maleic anhydride, Fatty acids, C14-18 and C16-18-unsaturated, maleated

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

Product categories [PC]: PC9 - Coatings and paints, fillers, putties, thinners
Sector of uses [SU]: SU19 - Building and construction work

1.3. Details of the supplier of the safety data sheet

Supplier: conti coatings GmbH
Feldstrasse 55
D - 46149 Oberhausen
Telefon: +49 208/ 9948-0
Telefax: +49 208/ 650625
www.conticoatings.com

E-mail address: sds.ob@kluthe.com

1.4. Emergency telephone number

Emergency Telephone: +49 177 / 214 4737 (24 h)

| | |
|--|--|
| Emergency Telephone - §45 - (EC)1272/2008 | |
| Europe | 112 |
| Austria | +43 1 406 43 43 (Giftinformationszentrale) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|---|----------------------|
| Flammable liquids | Category 3 - (H226) |
| Skin sensitization | Category 1A - (H317) |
| Specific target organ toxicity (single exposure) | Category 3 - (H336) |
| Chronic aquatic toxicity | Category 3 - (H412) |

2.2. Label elements



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Signal word: Warning

Hazard components for labeling:

Contains n-Butyl acetate, Bisphenol A diglycidyl ether, Maleic anhydride, Fatty acids, C14-18 and C16-18-unsaturated, maleated

Hazard statements:

H226 - Flammable liquid and vapor.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H412 - Harmful to aquatic life with long lasting effects.

EU Specific Hazard Statements:

EUH066 - Repeated exposure may cause skin dryness or cracking.

Precautionary Statements - EU (§28, 1272/2008):

P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P271 - Use only outdoors or in a well-ventilated area
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other hazards

Causes mild skin irritation.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | CAS No | EC No | REACH registration number | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Weight-% |
|--|----------|-----------|---------------------------|---|-----------|
| n-Butyl acetate | 123-86-4 | 204-658-1 | 01-2119485493-29 | Flam. Liq. 3 (H226) STOT SE 3 (H336) (EUH066) | 10 - < 25 |
| xylene (reaction product of xylene and ethylbenzene) | - | 905-588-0 | 01-2119539452-40 | Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) STOT RE 2 (H373) | 5 - < 10 |
| hydrocarbons, C9, aromats | - | 918-668-5 | 01-2119455851-35 | Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) STOT SE 3 (H335) | 5 - < 10 |

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| | | | | | |
|--|------------|-----------|------------------|--|-----------------|
| | | | | STOT SE 3 (H336) Aquatic Chronic 2 (H411) (EUH066) | |
| Bisphenol A diglycidyl ether | 1675-54-3 | 216-823-5 | 01-2119456619-36 | Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411) | 0.5 - < 1 |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated | 85711-46-2 | 288-306-2 | 01-2119978273-29 | Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Irrit. 2 (H319) | 0.1 - < 0.25 |
| Quartz | 14808-60-7 | 238-878-4 | - | [B] | 0.005 - < 0.01 |
| Methyl methacrylate | 80-62-6 | 201-297-1 | - | Flam. Liq. 2 (H225) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) STOT SE 3 (H335) | 0.005 - < 0.01 |
| Maleic anhydride | 108-31-6 | 203-571-6 | 01-2119472428-31 | Acute Tox. 4 (H302) Skin Corr. 1B (H314) Skin Sens. 1A (H317) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) STOT RE 1 (H372) (EUH071) | 0.001 - < 0.005 |
| Propylene glycol monomethyl ether acetate | 108-65-6 | 203-603-9 | 01-2119475791-29 | Flam. Liq. 3 (H226) STOT SE 3 (H336) | 0.001 - < 0.005 |

[B] - Substance with a Community workplace exposure limit

[I] - Restricted substance per REACH Annex XVII

| Chemical name | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) | Notes |
|---|---|----------|----------------------|-------|
| Bisphenol A diglycidyl ether 1675-54-3 | Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5% | | | |
| Methyl methacrylate 80-62-6 | STOT SE 3 :: C>=10% | | | D |
| Maleic anhydride 108-31-6 | Skin Sens. 1A :: C>=0.001% | | | |

Acute Toxicity Estimate:

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapor - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|-----------|-------------|---|---|--------------------------------------|
| n-Butyl acetate 123-86-4 | 10768 | 17060 | No data available | 23.4 | No data available |
| xylene (reaction product of xylene and ethylbenzene) - | 3523 | 12126 | 1.5 | 27.1 | No data available |
| hydrocarbons, C9, aromats | 3592 | 3200 | No data available | No data available | No data available |

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| - | | | | | |
|--|------|------|-------------------|-------------------|-------------------|
| Bisphenol A diglycidyl ether 1675-54-3 | 2002 | 2002 | No data available | No data available | No data available |
| Methyl methacrylate 80-62-6 | 8420 | 5000 | No data available | 29.0421 | No data available |
| Maleic anhydride 108-31-6 | 1090 | 2620 | 0.00435 | No data available | No data available |
| Propylene glycol monomethyl ether acetate 108-65-6 | 8532 | 5005 | No data available | No data available | No data available |

hazardous components above-mentioned substances/ substance mixtures:

| Chemical name | CAS No | EC No | REACH registration number | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Weight-% |
|---|-----------|-----------|---------------------------|---|----------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 1330-20-7 | 215-535-7 | 01-2119488216-32 | Flam. Liq. 3 (H226) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Acute Tox. 4 (H332) | 5 - < 10 |
| Ethylbenzene 100-41-4 | 100-41-4 | 202-849-4 | 01-2119489370-35 | Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Acute Tox. 4 (H332) STOT RE 2 (H373) | 1 - < 3 |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|-------------------------------------|---|
| General advice: | Show this safety data sheet to the doctor in attendance. |
| Inhalation: | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. |
| Eye contact: | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. |
| Skin contact: | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion: | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician. |
| Self-protection of the first aider: | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. |

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

| | |
|-----------|--|
| Symptoms: | Itching. Rashes. Hives. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation. |
|-----------|--|

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

Note to physicians: May cause sensitization in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media: Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical: Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information: Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions: Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth,

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sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up: Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections: See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling



Advice on safe handling: Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations: Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

7.3. Specific end use(s)

Other information: No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits:

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| Chemical name | European Union | Germany | Netherlands | Spain | United Kingdom | Hungary |
|--|--|--|---|---|--|---|
| n-Butyl acetate 123-86-4 | | TWA: 62 ppm TWA: 300 mg/m ³ | | TWA: 150 ppm TWA: 724 mg/m ³ STEL: 200 ppm STEL: 965 mg/m ³ | TWA: 150 ppm TWA: 724 mg/m ³ STEL: 200 ppm STEL: 966 mg/m ³ | TWA: 950 mg/m ³ STEL: 950 mg/m ³ |
| hydrocarbons, C9, aromats - | | RCP: C9-14 aromates: STEL: 50 mg/m ³ - 2(II) | | | | |
| Quartz 14808-60-7 | TWA: 0.1 mg/m ³ | | TWA: 0.075 mg/m ³ | TWA: 0.05 mg/m ³ | TWA: 0.1 mg/m ³ | TWA: 0.15 mg/m ³ |
| Methyl methacrylate 80-62-6 | TWA: 50 ppm STEL: 100 ppm | TWA: 50 ppm TWA: 210 mg/m ³ | TWA: 205 mg/m ³ STEL: 410 mg/m ³ | TWA: 50 ppm STEL: 100 ppm | TWA: 50 ppm TWA: 208 mg/m ³ STEL: 100 ppm STEL: 416 mg/m ³ | TWA: 208 mg/m ³ STEL: 415 mg/m ³ b* |
| Maleic anhydride 108-31-6 | | TWA: 0.02 ppm TWA: 0.081 mg/m ³ | | TWA: 0.1 ppm TWA: 0.4 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 0.4 mg/m ³ STEL: 0.4 mg/m ³ |
| Propylene glycol monomethyl ether acetate 108-65-6 | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ * | TWA: 50 ppm TWA: 270 mg/m ³ | TWA: 550 mg/m ³ | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ vía dérmica* | TWA: 50 ppm TWA: 274 mg/m ³ STEL: 100 ppm STEL: 548 mg/m ³ Sk* | TWA: 275 mg/m ³ STEL: 550 mg/m ³ |

| Chemical name | European Union | Germany | Netherlands | Spain | United Kingdom | Hungary |
|--|---|--|---|--|---|---|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ * | TWA: 100 ppm TWA: 440 mg/m ³ H* | TWA: 210 mg/m ³ STEL: 442 mg/m ³ H* | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ vía dérmica* | TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 441 mg/m ³ Sk* | TWA: 221 mg/m ³ STEL: 442 mg/m ³ b* |
| Ethylbenzene 100-41-4 | TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ * | TWA: 20 ppm TWA: 88 mg/m ³ H* | TWA: 215 mg/m ³ STEL: 430 mg/m ³ H* | TWA: 100 ppm TWA: 441 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ vía dérmica* | TWA: 100 ppm TWA: 441 mg/m ³ STEL: 125 ppm STEL: 552 mg/m ³ Sk* | TWA: 442 mg/m ³ STEL: 884 mg/m ³ b* |

| Chemical name | France | Italy | Portugal | Finland | Denmark | Czech Republic |
|--|--|---|---|---|--|---|
| n-Butyl acetate 123-86-4 | TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 940 mg/m ³ | | TWA: 150 ppm STEL: 200 ppm | TWA: 150 ppm TWA: 720 mg/m ³ STEL: 200 ppm STEL: 960 mg/m ³ | TWA: 150 ppm TWA: 710 mg/m ³ | TWA: 950 mg/m ³ Ceiling: 1200 mg/m ³ |
| Quartz 14808-60-7 | TWA: 0.1 mg/m ³ | | TWA: 0.025 mg/m ³ | TWA: 0.05 mg/m ³ | TWA: 0.3 mg/m ³ TWA: 0.1 mg/m ³ | TWA: 0.1 mg/m ³ |
| Methyl methacrylate 80-62-6 | TWA: 50 ppm TWA: 205 mg/m ³ STEL: 100 ppm STEL: 410 mg/m ³ | TWA: 50 ppm STEL: 100 ppm | TWA: 50 ppm STEL: 100 ppm | TWA: 10 ppm TWA: 42 mg/m ³ STEL: 50 ppm STEL: 210 mg/m ³ | TWA: 25 ppm TWA: 102 mg/m ³ H* | TWA: 50 mg/m ³ Ceiling: 150 mg/m ³ D* |
| Maleic anhydride 108-31-6 | STEL: 1 mg/m ³ | | TWA: 0.01 mg/m ³ | TWA: 0.1 ppm TWA: 0.41 mg/m ³ Ceiling: 0.2 ppm Ceiling: 0.81 mg/m ³ | TWA: 0.1 ppm TWA: 0.4 mg/m ³ | TWA: 1 mg/m ³ Ceiling: 2 mg/m ³ |
| Propylene glycol monomethyl ether acetate 108-65-6 | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ * | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ pelle* | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ P* | TWA: 50 ppm TWA: 270 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ iho* | TWA: 50 ppm TWA: 275 mg/m ³ H* | TWA: 270 mg/m ³ Ceiling: 550 mg/m ³ D* |

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| Chemical name | France | Italy | Portugal | Finland | Denmark | Czech Republic |
|--|---|--|--|---|---|----------------|
| Xylenes (o-, m-, p-isomers) 1330-20-7 | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ * | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ pelle* | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ P* | TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 440 mg/m ³ iho* | TWA: 25 ppm TWA: 109 mg/m ³ H* | |
| Ethylbenzene 100-41-4 | TWA: 20 ppm TWA: 88.4 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ * | TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ pelle* | TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ P* | TWA: 50 ppm TWA: 220 mg/m ³ STEL: 200 ppm STEL: 880 mg/m ³ iho* | TWA: 50 ppm TWA: 217 mg/m ³ H* | |

| Chemical name | Austria | Switzerland | Poland | Norway | Ireland | Russia |
|---|--|--|---|--|--|--|
| n-Butyl acetate 123-86-4 | TWA: 100 ppm TWA: 480 mg/m ³ STEL 100 ppm STEL 480 mg/m ³ Ceiling 100 ppm Ceiling 480 mg/m ³ | TWA: 100 ppm TWA: 480 mg/m ³ STEL: 200 ppm STEL: 960 mg/m ³ | STEL: 720 mg/m ³ TWA: 240 mg/m ³ | TWA: 75 ppm TWA: 355 mg/m ³ STEL: 112.5 ppm STEL: 443.75 mg/m ³ | TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³ | TWA: 50 mg/m ³ STEL: 200 mg/m ³ |
| Quartz 14808-60-7 | TWA: 0.15 mg/m ³ | TWA: 0.15 mg/m ³ | TWA: 0.1 mg/m ³ | TWA: 0.3 mg/m ³ TWA: 0.1 mg/m ³ STEL: 0.9 mg/m ³ STEL: 0.3 mg/m ³ | TWA: 0.1 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |
| Methyl methacrylate 80-62-6 | TWA: 50 ppm TWA: 210 mg/m ³ STEL 100 ppm STEL 420 mg/m ³ | TWA: 50 ppm TWA: 210 mg/m ³ STEL: 100 ppm STEL: 420 mg/m ³ | STEL: 300 mg/m ³ TWA: 100 mg/m ³ | TWA: 25 ppm TWA: 100 mg/m ³ STEL: 100 ppm STEL: 400 mg/m ³ | TWA: 50 ppm STEL: 100 ppm | TWA: 10 mg/m ³ STEL: 20 mg/m ³ |
| Maleic anhydride 108-31-6 | TWA: 0.1 ppm TWA: 0.4 mg/m ³ STEL 0.2 ppm STEL 0.8 mg/m ³ | TWA: 0.1 ppm TWA: 0.4 mg/m ³ STEL: 0.1 ppm STEL: 0.4 mg/m ³ | STEL: 1 mg/m ³ TWA: 0.5 mg/m ³ | TWA: 0.2 ppm TWA: 0.8 mg/m ³ STEL: 0.6 ppm STEL: 2.4 mg/m ³ | TWA: 0.01 ppm STEL: 0.03 ppm | MAC: 1 mg/m ³ Skin |
| Propylene glycol monomethyl ether acetate 108-65-6 | TWA: 50 ppm TWA: 275 mg/m ³ STEL 100 ppm STEL 550 mg/m ³ H* | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 50 ppm STEL: 275 mg/m ³ | STEL: 520 mg/m ³ TWA: 260 mg/m ³ | TWA: 50 ppm TWA: 270 mg/m ³ STEL: 75 ppm STEL: 337.5 mg/m ³ H* | TWA: 50 ppm TWA: 275 mg/m ³ STEL: 100 ppm STEL: 550 mg/m ³ Sk* | MAC: 10 mg/m ³ |

| Chemical name | Austria | Switzerland | Poland | Norway | Ireland | Russia |
|--|--|--|---|--|---|--|
| Xylenes (o-, m-, p-isomers) 1330-20-7 | TWA: 50 ppm TWA: 221 mg/m ³ STEL 100 ppm STEL 442 mg/m ³ | TWA: 100 ppm TWA: 435 mg/m ³ STEL: 200 ppm STEL: 870 mg/m ³ H* | STEL: 200 mg/m ³ TWA: 100 mg/m ³ | TWA: 25 ppm TWA: 108 mg/m ³ STEL: 37.5 ppm STEL: 135 mg/m ³ H* | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Sk* | TWA: 50 mg/m ³ STEL: 150 mg/m ³ |
| Ethylbenzene 100-41-4 | TWA: 100 ppm TWA: 440 mg/m ³ STEL 200 ppm STEL 880 mg/m ³ H* | TWA: 50 ppm TWA: 220 mg/m ³ STEL: 50 ppm STEL: 220 mg/m ³ H* | STEL: 400 mg/m ³ TWA: 200 mg/m ³ | TWA: 5 ppm TWA: 20 mg/m ³ STEL: 10 ppm STEL: 30 mg/m ³ H* | TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Sk* | TWA: 50 mg/m ³ STEL: 150 mg/m ³ |

Biological occupational exposure limits:

| Chemical name | European Union | Germany | Netherlands | Spain | United Kingdom | Hungary |
|--|----------------|---|-------------|--|---|---------|
| Xylenes (o-, m-, p-isomers) 1330-20-7 | | 2000 mg/L - urine (Methylhippuric(tolur-)acid (all isomers)) - end of shift | | 1 g/g Creatinine - urine (Methylhippuric acids) - end of shift | 650 mmol/mol creatinine - urine (Methyl hippuric acid) - post shift | |

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|--------------------------|----------------|---|-------------|---|----------------|---------|
| Ethylbenzene 100-41-4 | | 250 mg/g Creatinine - urine (Mandelic acid plus Phenylglyoxylic acid) - end of shift | | 700 mg/g Creatinine - urine (Mandelic acid plus Phenylglyoxylic acid) - end of workweek | | |

| Chemical name | France | Italy | Portugal | Finland | Denmark | Czech Republic |
|--|--|-------|----------|--|---------|----------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 1500 mg/g creatinine - urine (Methylhippuric acid) - end of shift | | | 5.0 mmol/L - urine (Methylhippuric acid) - after the shift | | |
| Ethylbenzene 100-41-4 | 1500 mg/g creatinine - urine (Mandelic acid) - end of shift at end of workweek | | | 5.2 mmol/L - urine (Mandelic acid) - after the shift after a working week or exposure period | | |

| Chemical name | Austria | Switzerland | Poland | Norway | Ireland | Russia |
|--|---|---|--------|--------|---|--------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 1.5 g/L - urine (Methylhippuric acid) - after end of work day, at the end of a work week/end of the shift | 2 g/L - urine (Methylhippuric acid) - end of shift | | | 1.5 g/g Creatinine - urine (Methylhippuric acids) - end of shift | |
| Ethylbenzene 100-41-4 | | 600 mg/g creatinine - urine (Mandelic acid and Phenylglyoxylacid) - end of shift | | | 0.7 g/g Creatinine - urine (sum of Mandelic acid and Phenylglyoxylic acid) - end of shift at end of workweek 0.7 g - end-exhaled air () - not critical | |

Derived No Effect Level (DNEL):

component information:

Worker - inhalative:

| Chemical name | long term, systemic | short term, systemic | long term, local | short term, local |
|---|-------------------------|-------------------------|------------------------|------------------------|
| n-Butyl acetate | 300 mg/m ³ | | | 600 mg/m ³ |
| xylene (reaction product of xylene and ethylbenzene) | 221 mg/m ³ | 442 mg/m ³ | 221 mg/m ³ | 442 mg/m ³ |
| hydrocarbons, C9, aromats | 150 mg/m ³ | | | |
| Bisphenol A diglycidyl ether | 12.25 mg/m ³ | 12.25 mg/m ³ | | |
| Maleic anhydride | 190 µg/cm ² | 800 µg/cm ² | 320 µg/cm ² | 800 µg/cm ² |
| Propylene glycol monomethyl ether acetate | 275 mg/m ³ | | | 550 mg/m ³ |

| Chemical name | short term, local | short term, systemic | long term, local | long term, systemic |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Xylenes (o-, m-, p- isomers) | 442 mg/m ³ | 442 mg/m ³ | 221 mg/m ³ | 221 mg/m ³ |

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| <i>Chemical name</i> | <i>short term, local</i> | <i>short term, systemic</i> | <i>long term, local</i> | <i>long term, systemic</i> |
|----------------------|--------------------------|-----------------------------|-------------------------|----------------------------|
| Ethylbenzene | 293 mg/m ³ | | | 77 mg/m ³ |

Worker - dermal:

| Chemical name | long term, systemic | short term, systemic | long term, local | short term, local |
|--|----------------------------|-----------------------------|-------------------------|--------------------------|
| n-Butyl acetate | 11 mg/kg | | | |
| xylene (reaction product of xylene and ethylbenzene) | 212 mg/kg bw/day | | | |
| hydrocarbons, C9, aromats | 25 mg/kg bw/day | | | |
| Bisphenol A diglycidyl ether | 8.33 mg/kg bw/day | 8.33 mg/kg bw/day | | |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated | 3.33 mg/kg bw/day | | | |
| Propylene glycol monomethyl ether acetate | 796 mg/kg bw/day | | | |

| <i>Chemical name</i> | <i>short term, local</i> | <i>short term, systemic</i> | <i>long term, local</i> | <i>long term, systemic</i> |
|----------------------|--------------------------|-----------------------------|-------------------------|----------------------------|
| Ethylbenzene | | | | 180 mg/kg bw/day |

Consumer - inhalative:

| Chemical name | long term, systemic | short term, systemic | long term, local | short term, local |
|--|----------------------------|-----------------------------|-------------------------|--------------------------|
| n-Butyl acetate | 35.7 mg/m ³ | | | 300 mg/m ³ |
| xylene (reaction product of xylene and ethylbenzene) | 65.3 mg/m ³ | 260 mg/m ³ | 65.3 mg/m ³ | 260 mg/m ³ |
| hydrocarbons, C9, aromats | 32 mg/m ³ | | | |
| Maleic anhydride | 0.05 mg/m ³ | | 0.08 mg/m ³ | |
| Propylene glycol monomethyl ether acetate | 33 mg/m ³ | | 33 mg/m ³ | |

| <i>Chemical name</i> | <i>short term, local</i> | <i>short term, systemic</i> | <i>long term, local</i> | <i>long term, systemic</i> |
|------------------------------|--------------------------|-----------------------------|-------------------------|----------------------------|
| Xylenes (o-, m-, p- isomers) | 260 mg/m ³ | 260 mg/m ³ | 65.3 mg/m ³ | 65.3 mg/m ³ |
| Ethylbenzene | | | | 15 mg/m ³ |

Consumer - dermal:

| Chemical name | long term, systemic | short term, systemic | long term, local | short term, local |
|--|----------------------------|-----------------------------|-------------------------|--------------------------|
| n-Butyl acetate | 6 mg/kg bw/day | | | |
| xylene (reaction product of xylene and ethylbenzene) | 125 mg/kg bw/day | | | |
| hydrocarbons, C9, aromats | 11 mg/kg bw/day | | | |
| Bisphenol A diglycidyl ether | 3.571 mg/kg bw/day | 3.571 mg/kg bw/day | | |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated | 1.67 mg/kg bw/day | | | |
| Maleic anhydride | 0.1 mg/kg bw/day | 0.1 mg/kg bw/day | | |
| Propylene glycol monomethyl ether acetate | 320 mg/kg bw/day | | | |

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| <i>Chemical name</i> | <i>short term, local</i> | <i>short term, systemic</i> | <i>long term, local</i> | <i>long term, systemic</i> |
|------------------------------|--------------------------|-----------------------------|-------------------------|----------------------------|
| Xylenes (o-, m-, p- isomers) | | | | 125 mg/kg bw/day |

consumer - oral:

| Chemical name | long term, systemic | short term, systemic | long term, local | short term, local |
|--|----------------------------|-----------------------------|-------------------------|--------------------------|
| n-Butyl acetate | 2 mg/kg bw/day | | | |
| xylene (reaction product of xylene and ethylbenzene) | 12.5 mg/kg bw/day | | | |
| hydrocarbons, C9, aromats | 11 mg/kg bw/day | | | |
| Bisphenol A diglycidyl ether | 0.75 mg/kg bw/day | 0.75 mg/kg bw/day | | |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated | 1.67 mg/kg bw/day | | | |
| Maleic anhydride | 0.06 mg/kg bw/day | 0.1 mg/kg bw/day | | |
| Propylene glycol monomethyl ether acetate | 36 mg/kg bw/day | | | |

| <i>Chemical name</i> | <i>short term, local</i> | <i>short term, systemic</i> | <i>long term, local</i> | <i>long term, systemic</i> |
|------------------------------|--------------------------|-----------------------------|-------------------------|----------------------------|
| Xylenes (o-, m-, p- isomers) | | | | 12.5 mg/kg bw/day |
| Ethylbenzene | | | | 1.6 mg/kg bw/day |

Predicted No Effect Concentration (PNEC):

component information:

| Chemical name | n-Butyl acetate |
|----------------------------|------------------------|
| Freshwater | 0.18 mg/L |
| Marine water | 0.018 mg/L |
| Intermittent release | 0.36 mg/L |
| Impact on Sewage Treatment | 35.6 mg/L |
| Freshwater sediment | 0.981 mg/kg |
| Marine sediment | 0.098 mg/kg |
| Soil | 0.0903 mg/kg |

| Chemical name | xylene (reaction product of xylene and ethylbenzene) |
|----------------------------|---|
| Freshwater | 0.327 mg/L |
| Marine water | 0.327 mg/L |
| Intermittent release | 0.327 mg/L |
| Impact on Sewage Treatment | 6.58 mg/L |
| Freshwater sediment | 12.46 mg/kg |
| Marine sediment | 12.46 mg/kg |
| Soil | 2.31 mg/kg |

| Chemical name | Bisphenol A diglycidyl ether |
|----------------------------|-------------------------------------|
| Freshwater | 6 µg/L |
| Marine water | 0.6 µg/L |
| Intermittent release | 18 µg/L |
| Impact on Sewage Treatment | 10 mg/L |
| Freshwater sediment | 0.996 mg/kg |
| Marine sediment | 0.0996 mg/kg |
| Soil | 0.196 mg/kg |

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| Chemical name | Maleic anhydride |
|---------------------|--------------------------------|
| Freshwater | 75-100 µg/L |
| Marine water | 428.1-750 µg/L |
| Freshwater sediment | 0.06-0.334 mg/kg dry weight |
| Marine sediment | 0.006-0.0334 mg/kg dry weight |
| Soil | 0.001-0.00415 mg/kg dry weight |

| Chemical name | Propylene glycol monomethyl ether acetate |
|----------------------------|---|
| Freshwater | 0.635 mg/L |
| Marine water | 0.0635 mg/L |
| Intermittent release | 6.35 mg/L |
| Impact on Sewage Treatment | 100 mg/L |
| Freshwater sediment | 3.29 mg/kg |
| Marine sediment | 0.329 mg/kg |
| Soil | 0.29 mg/kg |

| Chemical name | Xylenes (o-, m-, p- isomers) |
|----------------------------|------------------------------|
| Marine water | 0.327 mg/L |
| Intermittent release | 0.327 mg/L |
| Impact on Sewage Treatment | 6.58 mg/L |
| Freshwater sediment | 12.46 mg/kg |
| Marine sediment | 12.46 mg/kg |
| Soil | 2.31 mg/kg |

| Chemical name | Ethylbenzene |
|----------------------------|-----------------------|
| Freshwater | 0.1 mg/L |
| Marine water | 0.01 - 0.1 mg/L |
| Intermittent release | 0.1 mg/L |
| Impact on Sewage Treatment | 9.6 mg/L |
| Freshwater sediment | 13.7 mg/kg |
| Marine sediment | 1.37 mg/kg |
| Soil | 2.68 mg/kg dry weight |
| Food chain | 20 mg/kg dry weight |

8.2. Exposure controls

Engineering controls: None under normal use conditions.

Personal protective equipment:



Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves. Impervious gloves.

| PPE - Glove material | Glove thickness | Break through time |
|----------------------|-----------------|--------------------|
| NBR (Nitrile rubber) | 0.4 mm | >=480 min. |

Skin and body protection: Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

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Antistatic boots.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Recommended Filter Type: Filtering device (full mask or mouthpiec AP-2

Environmental exposure controls: No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | | | | | |
|-------------------------------|----------------|-------|--------------------|-------------------|---------------|-----------------|
| Appearance | Liquid | | | | | |
| Color | blue | | | | | |
| Odor | characteristic | | | | | |
| Melting point / melting range | | | | <i>Conditions</i> | <i>Method</i> | <i>Remarks</i> |
| Boiling point / boiling range | > | 100 | °C | | | Not established |
| Flammability | | | | | | Not established |
| Decomposition temperature | | | | | | not relevant |
| Flash point | > | 23 | °C | | | |
| Autoignition temperature | | | | | | None known |
| Lower explosive limit | | | | | | not relevant |
| Upper explosion limit | | | | | | not relevant |
| Vapor pressure | > | 1100 | hPa | 50 °C | | |
| Density | ~ | 1.430 | g/cm ³ | 20 °C | | |
| Water solubility | | | | | | Immiscible |
| pH | | | | | | Not applicable |
| pH (as aqueous solution) | | | | | | Not established |
| Partition coefficient | | | | | | Not established |
| Kinematic viscosity | > | 21 | mm ² /s | 40 °C | | |
| Odor threshold | | | | | | Not established |
| Relative density | | | | | | Not established |
| Evaporation rate | | | | | | Not established |

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Relative vapor density no data available
Particle Size no data available
Particle Size Distribution no data available

9.2. Other information

Bulk density: no data available
Softening point No information available
Molecular weight No information available

9.2.1. Information with regard to physical hazard classes:

Explosive properties Not an explosive
Oxidizing properties Not oxidising.

9.2.2. Other safety characteristics: No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: No information available.

10.2. Chemical stability

Stability: Stable under normal conditions.

Explosion data:

Sensitivity to mechanical impact: None.
Sensitivity to static discharge: Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: None under normal processing.

10.4. Conditions to avoid

Conditions to avoid: Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials: None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products: None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Information on likely routes of exposure:

Product Information:

- Inhalation: May cause drowsiness or dizziness.
- Eye contact: Specific test data for the substance or mixture is not available.
- Skin contact: May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes mild skin irritation.
- Ingestion: Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics:

- Symptoms: Itching. Rashes. Hives. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation.

Numerical measures of toxicity:

Acute toxicity: The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-------------------------------|-----------------|
| ATEmix (dermal) | 11,497.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 17.90 mg/l |
| ATEmix (inhalation-vapor) | 67.20 mg/l |

Component Information:

| Chemical name | Parameter | Species | effektive Dosis | Method |
|---|-----------|---------|--------------------|-----------------|
| n-Butyl acetate 123-86-4 | Oral LD50 | Rat | 10768 mg/kg | OECD 423 |
| xylene (reaction product of xylene and ethylbenzene) - | Oral LD50 | Rat | 3523 mg/kg | EG92/69/EWG B.1 |
| hydrocarbons, C9, aromats - | Oral LD50 | Rat | 3592 mg/kg | OECD 401 |
| Bisphenol A diglycidyl ether 1675-54-3 | Oral LD50 | Rat | > 2000 mg/kg | OECD 420 |
| Methyl methacrylate 80-62-6 | Oral LD50 | Rat | 8420 - 10000 mg/kg | |
| Maleic anhydride 108-31-6 | Oral LD50 | Rat | 1090 mg/kg | OECD 401 |
| Propylene glycol monomethyl ether acetate 108-65-6 | Oral LD50 | Rat | > 2000 mg/kg | OECD 401 |

| Chemical name | Parameter | Species | effektive Dosis | Method |
|---|-----------|---------|-----------------|--------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | Oral LD50 | Rat | 3500 mg/kg | |
| Ethylbenzene 100-41-4 | Oral LD50 | Rat | 3500 mg/kg | |

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| Chemical name | Parameters | Species | Effective dose | Method |
|---|-------------|---------|-------------------|----------|
| n-Butyl acetate 123-86-4 | Dermal LD50 | Rabbit | > 5000 mg/kg | OECD 402 |
| xylene (reaction product of xylene and ethylbenzene) - | Dermal LD50 | Rabbit | 12126 mg/kg | |
| hydrocarbons, C9, aromats - | Dermal LD50 | Rabbit | > 3160 mg/kg | OECD 402 |
| Bisphenol A diglycidyl ether 1675-54-3 | Dermal LD50 | Rat | > 2000 mg/kg | OECD 402 |
| Methyl methacrylate 80-62-6 | Dermal LD50 | Rabbit | 5000 - 7500 mg/kg | |
| Maleic anhydride 108-31-6 | Dermal LD50 | Rabbit | 2620 mg/kg | |
| Propylene glycol monomethyl ether acetate 108-65-6 | Dermal LD50 | Rabbit | > 5000 mg/kg | OECD 402 |

| Chemical name | Parameters | Species | Effective dose | Method |
|---|-------------|---------|----------------|--------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | Dermal LD50 | Rabbit | > 4350 mg/kg | |
| Ethylbenzene 100-41-4 | Dermal LD50 | Rabbit | 15400 mg/kg | |

| Chemical name | Parameters | Species | Effective dose | Exposure time | Method |
|---|-----------------|---------|-------------------------|---------------|----------|
| n-Butyl acetate 123-86-4 | Inhalation LC50 | Rat | 23.4 mg/m ³ | 4 h | OECD 403 |
| xylene (reaction product of xylene and ethylbenzene) - | Inhalation LC50 | Rat | 27124 mg/m ³ | 4 h | |
| Methyl methacrylate 80-62-6 | Inhalation LC50 | Rat | 7093 ppm | 4 h | |
| Maleic anhydride 108-31-6 | Inhalation LC50 | Rat | 4.35 mg/m ³ | 4 h | |

| Chemical name | Parameters | Species | Effective dose | Exposure time | Method |
|---|-----------------|---------|----------------|---------------|--------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | Inhalation LC50 | Rat | 29.08 mg/L | 4 h | |
| Ethylbenzene 100-41-4 | Inhalation LC50 | Rat | 17.4 mg/L | 4 h | |

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

| | |
|------------------------------------|--|
| Skin corrosion/irritation: | May cause skin irritation. |
| Serious eye damage/eye irritation: | No information available. |
| Respiratory or skin sensitization: | May cause sensitization by skin contact. |
| Germ cell mutagenicity: | No information available. |
| Carcinogenicity: | No information available. |
| Reproductive toxicity: | No information available. |

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STOT - single exposure: May cause drowsiness or dizziness.

STOT - repeated exposure: No information available.

| Chemical name | Exposure route | Target Organs |
|---|----------------|-----------------|
| xylene (reaction product of xylene and ethylbenzene) - | Inhalation | auditory organs |
| Maleic anhydride 108-31-6 | Inhalation | lung |

Aspiration hazard: No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity: Harmful to aquatic life with long lasting effects.

fish toxicity:

| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|--|-----------|--|--|---------------|----------|
| n-Butyl acetate 123-86-4 | LC50 | Pimephales promelas | 17 - 19 mg/L | 96 h | OECD 203 |
| xylene (reaction product of xylene and ethylbenzene) - | LC50 | Oncorhynchus mykiss | 2.6 mg/L | 96 h | OECD 203 |
| hydrocarbons, C9, aromats - | LC50 | Oncorhynchus mykiss | 9.22 mg/L | 96 h | |
| Bisphenol A diglycidyl ether 1675-54-3 | LC50 | Oncorhynchus mykiss | 1.5 mg/L | 96 h | OECD 203 |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2 | LC50 | Danio rerio | > 100 mg/L | 96 h | |
| Methyl methacrylate 80-62-6 | LC50 | Pimephales promelas Lepomis macrochirus Oncorhynchus mykiss Poecilia reticulata | 243 - 275 mg/L 125.5 - 190.7 mg/L 170 - 206 mg/L 153.9 - 341.8 mg/L | 96 h | |
| Maleic anhydride 108-31-6 | LC50 | Oncorhynchus mykiss | 75 mg/L | 96 h | |

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| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|---|-----------|---------------------|----------------|---------------|--------|
| Propylene glycol monomethyl ether acetate 108-65-6 | LC50 | Pimephales promelas | 161 mg/L | 96 h | |

| <i>Chemical name</i> | <i>Parameter</i> | <i>Species</i> | <i>Effective dose</i> | <i>Exposure time</i> | <i>Method</i> |
|---|------------------|---------------------|-----------------------|----------------------|---------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | LC50 | Pimephales promelas | 13.4 mg/L | 96 h | |
| Ethylbenzene 100-41-4 | LC50 | Oncorhynchus mykiss | 4.2 mg/L | 96 h | |

toxicity to crustacea:

| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|---|-----------|---------------|----------------|---------------|----------|
| n-Butyl acetate 123-86-4 | EC50 | Daphnia magna | 44 mg/L | 48 h | OECD 202 |
| xylene (reaction product of xylene and ethylbenzene) - | LC 50 | Daphnia magna | 1.0 mg/L | 24 h | OECD 202 |
| hydrocarbons, C9, aromats - | EC50 | Daphnia magna | 6.14 mg/L | 48 h | |
| Bisphenol A diglycidyl ether 1675-54-3 | EC50 | Daphnia magna | 2.7 mg/L | 48 h | |
| Methyl methacrylate 80-62-6 | EC50 | Daphnia magna | 69 mg/L | 48 h | |
| Maleic anhydride 108-31-6 | EC50 | Daphnia magna | 42.81 mg/L | 48 h | OECD 202 |
| Propylene glycol monomethyl ether acetate 108-65-6 | EC50 | Daphnia magna | > 500 mg/L | 48 h | |

| <i>Chemical name</i> | <i>Parameter</i> | <i>Species</i> | <i>Effective dose</i> | <i>Exposure time</i> | <i>Method</i> |
|---|------------------|----------------|-----------------------|----------------------|---------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | EC50 | Daphnia magna | 3.82 mg/L | 48 h | |
| Ethylbenzene 100-41-4 | EC50 | Daphnia magna | 1.8 - 2.4 mg/L | 48 h | |

Algae Toxicity:

| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|---|-----------|---------------------------------|----------------|---------------|----------|
| n-Butyl acetate 123-86-4 | EC50 | Desmodesmus subspicatus | 674.7 mg/L | 72 h | |
| xylene (reaction product of xylene and ethylbenzene) - | EC50 | Selenastrum capricornutum | 2.2 mg/L | 73 h | OECD 201 |
| hydrocarbons, C9, aromats - | EL50 | Pseudokirchneriella subcapitata | 2.6 - 2.9 mg/L | 72 h | |
| Bisphenol A diglycidyl ether 1675-54-3 | EC50 | Selenastrum capricornutum | 9.4 mg/L | 72 h | |
| Methyl methacrylate 80-62-6 | EC50 | Pseudokirchneriella subcapitata | 170 mg/L | 96 h | |
| Maleic anhydride | EC50 | Pseudokirchneriella | 74.35 mg/L | 72 h | OECD 201 |

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| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|---|-----------|---------------------------|----------------|---------------|----------|
| 108-31-6 | | subcapitata | | | |
| Propylene glycol monomethyl ether acetate 108-65-6 | EC50 | Selenastrum capricornutum | > 1000 mg/L | 72 h | OECD 201 |

| Chemical name | Parameter | Species | Effective dose | Exposure time | Method |
|--------------------------|-----------|---------------------------------|----------------|---------------|--------|
| Ethylbenzene 100-41-4 | EC50 | Pseudokirchneriella subcapitata | 4.6 mg/L | 72 h | |

Bacteria toxicity:

| Chemical name | Parameters | Species | Effective dose | Exposure time | Method |
|---|------------|------------------|----------------|---------------|------------|
| xylene (reaction product of xylene and ethylbenzene) - | NOEC | activated sludge | 16 mg/L | 28 d | OECD 301 F |
| Propylene glycol monomethyl ether acetate 108-65-6 | EC10 | activated sludge | > 1000 mg/L | 0.5 h | |

12.2. Persistence and degradability

Persistence and degradability:

| Chemical name | degradation rate | test duration | Rapidly biodegradable | Remarks | Method |
|---|------------------|---------------|-----------------------|------------------------------|------------|
| n-Butyl acetate 123-86-4 | 23 % | 28 d | Yes | | |
| xylene (reaction product of xylene and ethylbenzene) - | 90 % | 28 d | Yes | | |
| hydrocarbons, C9, aromats - | | | Yes | | |
| Maleic anhydride 108-31-6 | | | Yes | | |
| Propylene glycol monomethyl ether acetate 108-65-6 | 83 % | 28 d | Yes | Aerobic biological treatment | OECD 301 F |

| Chemical name | degradation rate | test duration | Rapidly biodegradable |
|---|------------------|---------------|-----------------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | | | Yes |
| Ethylbenzene 100-41-4 | 70 - 80 % | 28 d | Yes |

12.3. Bioaccumulative potential

Bioaccumulation:

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| Chemical name | Partition coefficient | Bioconcentration factor (BCF) |
|---|-----------------------|-------------------------------|
| n-Butyl acetate 123-86-4 | 1.81 | 15 |
| xylene (reaction product of xylene and ethylbenzene) - | 3.16 | 25.9 |
| Methyl methacrylate 80-62-6 | 0.7 | |
| Propylene glycol monomethyl ether acetate 108-65-6 | 0.43 | < 100 |

| Chemical name | Partition coefficient | Bioconcentration factor (BCF) |
|---|-----------------------|-------------------------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 2.77 - 3.15 | 0.6 - 15 |
| Ethylbenzene 100-41-4 | 3.2 | 15 |

12.4. Mobility in soil

Mobility in soil: No information available.

Mobility: No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment:

| Chemical name | PBT and vPvB assessment |
|--|--|
| n-Butyl acetate 123-86-4 | The substance is not PBT / vPvB |
| hydrocarbons, C9, aromats - | The substance is not PBT / vPvB |
| Bisphenol A diglycidyl ether 1675-54-3 | The substance is not PBT / vPvB |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2 | The substance is not PBT / vPvB |
| Methyl methacrylate 80-62-6 | The substance is not PBT / vPvB PBT assessment does not apply |
| Maleic anhydride 108-31-6 | The substance is not PBT / vPvB PBT assessment does not apply |
| Propylene glycol monomethyl ether acetate 108-65-6 | The substance is not PBT / vPvB |

| Chemical name | PBT and vPvB assessment |
|---|---------------------------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | The substance is not PBT / vPvB |
| Ethylbenzene 100-41-4 | The substance is not PBT / vPvB |

12.6. Endocrine disrupting properties.

No information available.

| Chemical name | EU - Endocrine Disrupters | EU - Endocrine Disrupters - |
|---------------|---------------------------|-----------------------------|
|---------------|---------------------------|-----------------------------|

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| | Candidate List | Evaluated Substances |
|---|-------------------|----------------------|
| Bisphenol A diglycidyl ether 1675-54-3 | Group II Chemical | - |

12.7. Other adverse effects.

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products: Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging: Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

Waste codes / waste designations according to EWC / AVV: 08 01 11* (Waste paint and varnish containing organic solvents or other dangerous substances)

SECTION 14: Transport information

14.1. UN number

ADR: UN1263
RID: UN1263
IMDG: UN1263
IATA: UN1263

14.2 UN proper shipping name

ADR: PAINT
UN1263, PAINT, 3, III

RID: PAINT
UN1263, PAINT, 3, III

IMDG: PAINT
UN1263, PAINT, 3, III, (23°C C.C.)

IATA: PAINT
UN1263, PAINT, 3, III

14.3. Transport hazard class(es)

ADR: 3
Hazard label(s) 3
Classification code F1
Hazard identification number 30
(Kemler No.)
Tunnel restriction code (D/E)
Limited quantity (LQ) 5 L
ADR excepted quantity E1

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| | |
|------------------------|----------|
| RID: | 3 |
| Labels | 3 |
| Classification code | F1 |
| IMDG: | 3 |
| Hazard label(s) | 3 |
| Limited quantity (LQ) | 5 L |
| IMDG Excepted Quantity | E1 |
| EmS-No | F-E, S-E |
| IATA: | 3 |
| Hazard label(s) | 3 |
| IATA Excepted Quantity | E1 |

14.4. Packing group

| | |
|-------|-----|
| ADR: | III |
| RID: | III |
| IMDG: | III |
| IATA: | III |

14.5. Environmental hazards

| | |
|-------|---------------------|
| ADR: | Not regulated |
| RID: | Not regulated |
| IMDG: | no marine pollutant |
| IATA: | Not regulated |

14.6. Special precautions for user

| | |
|---------------------|----------------------------|
| ADR: | |
| Special Provisions: | 163, 650, 367 |
| Note: | 2.2.3.1.5.1: n. a. < 450 L |
| RID: | |
| Special Provisions: | 163, 650, 367 |
| IMDG: | |
| Special Provisions: | 163, 223, 367, 955 |
| IATA: | |
| Special Provisions: | A3, A72, A192 |
| ERG Code | 3L |

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

No information available

SECTION 15: Regulatory information

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

European Union:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

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Authorizations and/or restrictions on use:

- This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name | Substance subject to authorization per REACH Annex XIV | Restricted substance per REACH Annex XVII |
|---|--|---|
| hydrocarbons, C9, aromats - | | 3. 28. 29. 40. |
| Bisphenol A diglycidyl ether 1675-54-3 | | 75. |
| Methyl methacrylate 80-62-6 | | 75. |
| Maleic anhydride 108-31-6 | | 75. |

| Chemical name | Substance subject to authorization per REACH Annex XIV | Restricted substance per REACH Annex XVII |
|---|--|---|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | | 75. |

Persistent Organic Pollutants: Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU):

- P5a - FLAMMABLE LIQUIDS
- P5b - FLAMMABLE LIQUIDS
- P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009: Not applicable

volatile organic compounds (VOC) content:

acc. reg. 2010/75/EG: 33.9 %
acc. reg. 2004/42/EG (Decopaint): 485 g/L

National regulations:

Denmark:

| Chemical name | Denmark - MAL |
|---|---|
| n-Butyl acetate 123-86-4 | 14 m ³ /10 g substance MAL factor >0 % by weight [1] |
| Bisphenol A diglycidyl ether 1675-54-3 | 0 m ³ /10 g substance MAL factor >=1.0 % by weight [5] |
| Quartz 14808-60-7 | 0 m ³ /10 g substance MAL factor 0.1 mg/m ³ Limit Value respirable >=0.1 - 2 % by weight [3] >=1 - 10 % by weight [3] >=10 % by weight [6] >=2 % by weight [6] |
| Methyl methacrylate 80-62-6 | 46 m ³ /10 g substance MAL factor >=1.0 - 5.0 % by weight [3] >=5.0 % by weight [5] |
| Maleic anhydride | 7500 m ³ /10 g substance MAL factor |

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| | |
|---|---|
| 108-31-6 | 0.1 ppm Limit Value >=1 % by weight [5] |
| Propylene glycol monomethyl ether acetate 108-65-6 | 19 m3/10 g substance MAL factor >0 % by weight [1] |

Germany:

Water hazard class (WGK): obviously hazardous to water (WGK 2) - Classification according to AwSV

| Chemical name | WGK Classification (AwSV) | ID number |
|--|---------------------------|-----------|
| n-Butyl acetate 123-86-4 | 1 | 42 |
| xylene (reaction product of xylene and ethylbenzene) - | 2 | 206 |
| hydrocarbons, C9, aromats - | 2 | - |
| Bisphenol A diglycidyl ether 1675-54-3 | 1 | - |
| Fatty acids, C14-18 and C16-18-unsaturated, maleated 85711-46-2 | 1 | 8839 |
| Quartz 14808-60-7 | nwg | 849 |
| Methyl methacrylate 80-62-6 | 1 | 154 |
| Maleic anhydride 108-31-6 | 1 | 261 |
| Propylene glycol monomethyl ether acetate 108-65-6 | 1 | 5033 |

| Chemical name | WGK Classification (AwSV) | ID number |
|---|---------------------------|-----------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 2 | 206 |
| Ethylbenzene 100-41-4 | 1 | 99 |

TA Luft (German Air Pollution Control Regulation):

total dust incl. fine dust (digit 5.2.1): 40 - 45%
inorg. subst. dust (digit 5.2.2) class III: < 5%
org. substances (Ziffer 5.2.5): 25 - 30%
org. subst. (digit 5.2.5) class I: 5 - 10%

Storage class (TRGS 510): 3 • LGK3 - Flammable liquids

France:

Occupational Illnesses (R-463-3, France):

| Chemical name | French RG number |
|-----------------------------|------------------|
| n-Butyl acetate 123-86-4 | RG 84 |
| hydrocarbons, C9, aromats | RG 84 |

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| Chemical name | French RG number |
|---|------------------|
| - | |
| Quartz 14808-60-7 | RG 25 |
| Methyl methacrylate 80-62-6 | RG 65, RG 82 |
| Maleic anhydride 108-31-6 | RG 66 |
| Propylene glycol monomethyl ether acetate 108-65-6 | RG 84 |

| Chemical name | French RG number |
|---|------------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | RG 4bis, RG 84 |
| Ethylbenzene 100-41-4 | RG 84 |

RG 4bis - Gastrointestinal conditions caused by benzene, toluene, xylenes, and any products containing them
 RG 25 - Conditions resulting from inhalation of mineral dusts containing crystalline silica (quartz, cristobalite, tridymite), crystalline silicates (kaolin, talc), graphite, or coal.
 RG 65 - Allergic eczema
 RG 66 - Occupational rhinitis and asthma
 RG 82 - Conditions caused by methyl methacrylate
 RG 84 - Occupational conditions caused by liquid organic solvents

Netherlands:

| Chemical name | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins | ZZS list: SVHC | (p)ZZS list: potential SVHC |
|----------------------|-----------------------------------|--------------------------------|---|----------------|-----------------------------|
| Quartz 14808-60-7 | Present X | | | | |

| Chemical name | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins | ZZS list: SVHC | (p)ZZS list: potential SVHC |
|---|-----------------------------------|--------------------------------|---|----------------|-----------------------------|
| Xylenes (o-, m-, p- isomers) 1330-20-7 | | | Development Category 2 | | |
| Ethylbenzene 100-41-4 | | | | | X |

Austria:

Flammable Liquids Regulations, VbF: Flammable liquids: All

Switzerland:

VOC content:: acc. VOCV CH 814.018, att. 1: 33.6 %

International Inventories:

TSCA Does not comply

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| | |
|---------------|-----------------|
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Does not comply |

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report: No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet:

Full text of H-Statements referred to under section 3:

- EUH066 - Repeated exposure may cause skin dryness or cracking
- EUH071 - Corrosive to the respiratory tract
- H225 - Highly flammable liquid and vapor
- H226 - Flammable liquid and vapor
- H302 - Harmful if swallowed
- H304 - May be fatal if swallowed and enters airways
- H312 - Harmful in contact with skin
- H314 - Causes severe skin burns and eye damage
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 - May cause respiratory irritation
- H336 - May cause drowsiness or dizziness
- H372 - Causes damage to organs through prolonged or repeated exposure
- H373 - May cause damage to organs through prolonged or repeated exposure
- H411 - Toxic to aquatic life with long lasting effects

Legend:

- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
- ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route)
- AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany)

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BCF: Bio-Concentration Factor
BOD(5): Biochemical oxygen demand (within 5 days)
CAS: Chemical Abstract Service
CLP: Classification, Labelling and Packaging
CMR: Carcinogenic, Mutagenic, toxic for Reproduction
DIN: German Standards Institute / German industrial norm
DNEL: Derived No Effect Level
DOC: Dissolved organic carbon
EAK/ AVV: European waste catalogue/ waste directory-regulation
EC50: Effective Concentration 50%
ECHA: European Chemical Agency
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
IATA: International Air Transport Association
IC50: Inhibition Concentration 50%
IMDG: International Maritime Dangerous Goods Code
LC50: Lethal Concentration 50% - LD50: Lethal dose 50%
MAK: Treshold limit values Germany
NLP: No Longer Polymers
NOAEC: No Observed Adverse Effect Concentration
NOAEL: No Observed Adverse Effect Level
OECD: Organization for Economic Cooperation and Development
PBT: persistent, bioaccumulative, toxic
PC: Product category
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation and Authorization of Chemicals
RID: Regulations concerning the international carriage of dangerous goods by rail
(Règlement International concernant le transport de marchandises dangereuses par chemin de fer)
STEL: Short-term Exposure Limit
STP: Sewage treatment plant
SVHC: Substance of Very High Concern
TLV: Threshold Limit Value
TWA: Time Weighted Average
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: very persistent, very bioaccumulative

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ceiling: Maximum limit value

* Skin designation

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - repeated exposure | Calculation method |

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| | |
|--------------------------|--------------------|
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS:

European Chemicals Agency (ECHA)

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006:

Disclaimer:

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End of Safety Data Sheet