Rhepanol - solvent welding agent

1.1. Product identifier
Rhepanol - solvent welding agent

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

Use of the substance/mixture
sealant

Uses advised against
Only use for the intended purpose.
The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet

Company name: FDT Flachdach Technologie GmbH & Co. KG
Street: Eisenbahnstraße 6-8
Place: D-68199 Mannheim
Telephone: +49 (621) 8504100
Fax: +49 (621) 8504200
E-mail: kundenservice@fdt.de
Contact person: Marco Anderer
Telephone: +49 (621) 8504563
E-mail: marco.anderer@fdt.de
Internet: http://www.fdt.de

Responsible Department: Arbeitssicherheit und Umweltschutz

1.4. Emergency telephone number:
Poison Control Center (Mayence, GER)
+49 (0)6131-19240 (24h - de, en)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Specific target organ toxicity - single exposure: STOT SE 3
Specific target organ toxicity - repeated exposure: STOT RE 2
Aspiration hazard: Asp. Tox. 1
Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Harmful in contact with skin or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

2.2. Label elements
Regulation (EC) No. 1272/2008
**Hazard components for labelling**

- xylene
- Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
- ethylbenzene
- butanone; ethyl methyl ketone

**Signal word:** Danger

**Pictograms:**

![Pictograms]

**Hazard statements**

- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312+H332 Harmful in contact with skin or if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- 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.

**Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P313 Take off contaminated clothing and wash immediately with soap and water.
- P331 Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501 Dispose of contents/container in accordance with national disposal regulations.

**2.3. Other hazards**

The components in this mixture do not meet the criteria for classification as PBT or vPvB.

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

### 3.2. Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>xylene</td>
<td>25-&lt;50 %</td>
</tr>
<tr>
<td>1330-20-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>215-535-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>921-024-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-41-4</td>
<td>ethylbenzene</td>
<td>5-&lt;15 %</td>
</tr>
<tr>
<td>202-849-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>2.5-&lt;10 %</td>
</tr>
</tbody>
</table>

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

Further Information

There is the following note: The classification of "Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane" as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1 wt% benzene (EINECS No 200-753-7). If the substance is not classified as a carcinogen, so at least the safety (102)-260-262-301 + 310-331 (Table 3.1) or the S phrases (2)-23-24-62 (Table 3.2) apply. This note applies only to certain complex oil-derived substances in Part 3 of this regulation.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
In case of troubles or persistent symptoms, consult an doctor/physician.
Remove persons from danger area and lie them down. Never orally infuse something to an unconscious person. No special first aid measures necessary. A vomiting, supine person must be brought into recovery position.
Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

After inhalation
Provide fresh air. In case of respiratory tract irritation, consult a physician.
In case of irregular breathing or respiratory arrest, perform artificial respiration.

After contact with skin
In case of skin contact, wash immediately with large quantities of water/polyethylene glycol 400 (Roticlean). Change contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

After ingestion
Rinse mouth, spit liquid again. Do NOT induce vomiting. Let water be drunken in little sips (dilution effect). Call a physician immediately. Aspiration hazard.
4.2. **Most important symptoms and effects, both acute and delayed**

- Harmful in contact with skin or if inhaled.
- May be fatal if swallowed and enters airways.
- Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
- May cause damage to organs through prolonged or repeated exposure.
- May cause drowsiness or dizziness.

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**

- **Unsuitable extinguishing media**
  - High power water jet.

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

- Vapours may form explosive mixtures with air. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Possible ignition over greater distances. Floats to the top and may ignite again. It may produce hazardous fumes like carbon monoxide or carbon dioxide.

5.3. **Advice for firefighters**

- Co-ordinate fire-fighting measures to the fire surroundings. Wear a self-contained breathing apparatus and chemical protective clothing.

**Additional information**

- Do not allow to enter into surface water or drains. Contaminated fire-fighting water must be collected separately.

**SECTION 6: Accidental release measures**

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

- Provide adequate ventilation. Keep away from sources of ignition - No smoking.
- Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. **Environmental precautions**

- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Do not allow to enter into surface water or drains.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.
- Do not rinse with water or watery detergents.

6.4. **Reference to other sections**

- Safe handling: see section 7
- Personal precautions: refer to section 8.
- Disposal: see section 13

**SECTION 7: Handling and storage**

7.1. **Precautions for safe handling**

- **Advice on safe handling**
  - Provide adequate ventilation as well as local exhaust at critical locations. Handle and open container with care.
  - Avoid the formation of aerosol.
**Advisory on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

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

**Requirements for storage rooms and vessels**

Store only in original container. Keep container tightly closed in a cool, well-ventilated place.

### 7.3. Specific end use(s)

Sealant

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Exposure limits (EH40)**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>Butan-2-one (methyl ethyl ketone)</td>
<td>200</td>
<td>600</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td>899</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
<td>100</td>
<td>441</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>125</td>
<td>552</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene: mixed isomers</td>
<td>50</td>
<td>220</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>441</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

**Biological Monitoring Guidance Values (EH40)**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Parameter</th>
<th>Value</th>
<th>Test material</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>Butan-2-one</td>
<td>butan-2-one</td>
<td>70 µmol/L</td>
<td>urine</td>
<td>Post shift</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene, o-, m-, p- or mixed isomers</td>
<td>methyl hippuric acid</td>
<td>650 mmol/mol</td>
<td>urine</td>
<td>Post shift</td>
</tr>
</tbody>
</table>
### DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>DNEL type</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>289 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>77 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>180 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>174 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>14,8 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>108 mg/kg bw/day</td>
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<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>1,6 mg/kg bw/day</td>
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<tr>
<td></td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>system ic</td>
<td>300 mg/kg bw/day</td>
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<td>inhalation</td>
<td>systemic</td>
<td>2085 mg/m³</td>
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<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>system ic</td>
<td>149 mg/kg bw/day</td>
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<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>149 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>447 mg/m³</td>
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<tr>
<td>100-41-4</td>
<td>ethylbenzene</td>
<td>Worker DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>289 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>77 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>180 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>inhalation</td>
<td>systemic</td>
<td>174 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>14,8 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>108 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>1,6 mg/kg bw/day</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>1161 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>600 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, acute</td>
<td>dermal</td>
<td>local</td>
<td>412</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>106 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>31 mg/kg bw/day</td>
</tr>
</tbody>
</table>
**Rhepanol - solvent welding agent**

**Safety Data Sheet**

Print date: 11.12.2015
Product code: RCSO-FDT-031

---

**PNEC values**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Environmental compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>Freshwater</td>
<td>0,327 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water</td>
<td>0,327 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td>0,327 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>6,58 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine sediment</td>
<td>12,46 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freshwater sediment</td>
<td>12,46 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil</td>
<td>2,31 mg/kg</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>Freshwater</td>
<td>55,8 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water</td>
<td>55,8 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>709 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil</td>
<td>22,5 mg/kg</td>
</tr>
</tbody>
</table>

---

**8.2. Exposure controls**

**Protective and hygiene measures**
Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Avoid skin, eye and clothing contact. After contact with skin, wash immediately with plenty of water and soap or a suitable cleaning agent.

**Eye/face protection**
Tightly fitting safety glasses with side shields.

**Hand protection**
Protect skin by using skin protective cream. Wear suitable gloves. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Suitable material: PVA (Polyvinyl alcohol). FKM (fluororubber).
penetration time (maximum wearing period): >480 minutes
Coating thickness: >0,4mm

**Skin protection**
Full cover clothing covering arms and legs.

**Respiratory protection**
Use protective filter mask in case of short-term and low exposure; in case of intense or longer exposure, use respiratory protection device operating independently from circulating air.
Recommended filtering device for short-term use:
Gas filter device according to EN 14387 Type A (organic gas/vapors, boiling point >65°C), code color: brown

---

**SECTION 9: Physical and chemical properties**

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

Physical state: liquid
Colour: colourless
Odour: characteristic

Test method
pH-Value: not determined
Rhepanol - solvent welding agent

Changes in the physical state
- Melting point: not determined
- Initial boiling point and boiling range: 80 °C
- Flash point: -9 °C

Flammability
- Gas: not determined

Explosive properties
- The product is not explosive, however, formation of explosive mixtures are possible.
- Lower explosion limits: 0.6 vol. %
- Upper explosion limits: 11.5 vol. %
- Ignition temperature: 270 °C

Auto-ignition temperature
- Gas: not determined

Decomposition temperature: not determined

Oxidizing properties
- not determined

Vapour pressure: 95 hPa
(at 20 °C)

Density (at 20 °C): 0.8 g/cm³
Water solubility: insoluble
Partition coefficient: not determined
Viscosity / dynamic: 0.6 mPa-s
(at 20 °C)
DIN 53217

9.2. Other information
No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
- No dangerous reactivity under regular conditions.

10.2. Chemical stability
- The product is stable under regular conditions.

10.3. Possibility of hazardous reactions
- No known hazardous reactions.

10.4. Conditions to avoid
- Avoid heat, sparks, open flames and other ignition sources. Electrostatic charges.

10.5. Incompatible materials
- Oxidizing agents, strong acid.

10.6. Hazardous decomposition products
- It may produce hazardous fumes like carbon monoxide or carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity
- Harmful in contact with skin or if inhaled.
### ATEmix calculated
ATE (dermal) 1421,9 mg/kg; ATE (inhalative vapour) 18,49 mg/l; ATE (inhalative aerosol) 2,312 mg/l

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>12126 mg/kg</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative vapour</td>
<td>ATE</td>
<td>11 mg/l</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative aerosol</td>
<td>ATE</td>
<td>1,5 mg/l</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;1999 mg/kg</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>&gt;23,2 mg/l</td>
<td>Rat</td>
<td></td>
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<td>100-41-4</td>
<td>ethylbenzene</td>
<td>oral</td>
<td>LD50</td>
<td>3500 mg/kg</td>
<td>Rat</td>
<td>GESTIS</td>
</tr>
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<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>15354 mg/kg</td>
<td>Rabbit</td>
<td>GESTIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>17,2-55 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative aerosol</td>
<td>ATE</td>
<td>1,5 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;2193 mg/kg</td>
<td>Rat</td>
<td>OECD 423</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>34 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

### Irritation and corrosivity
- Causes skin irritation.
- Causes serious eye irritation.

### Sensitising effects
Based on available data, the classification criteria are not met.

### STOT-single exposure
- May cause respiratory irritation. (xylene), (ethylbenzene)
- May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane), (butanone; ethyl methyl ketone)

### Severe effects after repeated or prolonged exposure
- May cause damage to organs through prolonged or repeated exposure. (xylene), (ethylbenzene)

### Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

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

### SECTION 12: Ecological information

#### 12.1. Toxicity
Toxic to aquatic life with long lasting effects.
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Method</th>
<th>Dose</th>
<th>h</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>7.6 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>4.7 mg/l</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>3.82 mg/l</td>
<td>48 h</td>
<td>Daphnia magna (Big water flea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>&gt;1-&lt;=10 mg/l</td>
<td>96 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>&gt;1-&lt;=10 mg/l</td>
<td>48 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-41-4</td>
<td>ethylbenzene</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>12.1 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>4.6 mg/l</td>
<td>96 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>2.1 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Butanone; ethyl methyl ketone</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>2990 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas</td>
<td>OECD 203</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>1972 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>OECD 201</td>
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<tr>
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<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>308 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>OECD 202</td>
<td></td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability
No data available.

### 12.3. Bioaccumulative potential
No data available.

### 12.4. Mobility in soil
No data available.

### 12.5. Results of PBT and vPvB assessment
The components in this mixture do not meet the criteria for classification as PBT or vPvB.

### 12.6. Other adverse effects
No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Advice on disposal**
- Disposal according to official regulations.
- Consult the local waste disposal expert about waste disposal. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

**Waste disposal number of waste from residues/unused products**
Waste disposal number of contaminated packaging
150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances Classified as hazardous waste.

Contaminated packaging
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, xylene)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Special Provisions: 274 601 640C
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)
14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, xylene)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Special Provisions: 274 601 640C
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)
14.1. UN number: UN 1993
Rhepanol - solvent welding agent

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, xylene)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Special Provisions: 274
Limited quantity: 1 L
Exempted quantity: E2
EmS: F-E, S-E

Air transport (ICAO)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, xylene)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Special Provisions: A3
Limited quantity Passenger: 1 L
Passenger LQ: Y341
Exempted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

14.6. Special precautions for user

No special precautions known.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information
2004/42/EC (VOC): 100%

Additional information
Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable
Regulation (EC) No. 648/2004 (Detergents regulation): not applicable
REGULATION (EC) No 850/2004 on persistent organic pollutants: not applicable
REGULATION (EC) No 689/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of dangerous chemicals: This mix contains no chemicals that are subject to the export notification procedures (annex 1).
This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none
This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

National regulatory information
Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes
Version 1.00 - Creation - 07.07.2014
Version 1.01 - Classification/Labeling according Regulation No.1272/2008 (GHS/CLP) and general revision - 28.07.2015

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
EC: Effective Concentration
EG: European Community (Europäische Gemeinschaft)
EN: European Norm
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
CLP: Classification, Labeling, Packaging
IUCLID: International Uniform Chemical Information Database
LC: Lethal concentration
LD: Lethal dose
log Kow: Octanol/water partition coefficient
MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from Ships
OECD: Organisation for Economic Co-operation and Development
PBT: Persistent, bio-cumulative, toxic
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail
TRGS: Technische Regeln für Gefahrstoffe
VOC: Volatile Organic Compounds
vPvB: very persistent and very bio-cumulative
VwVwS: Administrative Regulation for Water Pollutants
WGK: German Water Hazard Class
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
TLV: Threshold Limiting Value
STOT: Specific Target Organ Toxicity
### Relevant H and EUH statements (number and full text)

- **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.
- **H312+H332**  Harmful in contact with skin or if inhaled.
- **H315**  Causes skin irritation.
- **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.
- **EUH066**  Repeated exposure may cause skin dryness or cracking.

### Further Information

The information given in this safety data sheet is to describe the product's safety regulations. It is not for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*