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

1.1 Product identifier
   Trade name: Sample Agent Alu Zinc 100 750 ml 17-09016

1.2 Relevant identified uses of the substance or mixture and uses advised against
   This information is not available.

1.3 Details of the supplier of the safety data sheet
   Company: ECKART GmbH
             Guentersthal 4
             91235 Hartenstein
   Telephone: +499152770
   Telefax: +499152777008
   E-mail address: msds.eckart@altana.com
   Responsible/issuing person

1.4 Emergency telephone number
   GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
   From outside US: (001) 352-323-3500
   (First call in English, response in your language is possible)
   US & Canada (toll free): 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

   Classification (REGULATION (EC) No 1272/2008)
   Flammable liquids, Category 2
   Skin irritation, Category 2
   Eye irritation, Category 2
   Specific target organ toxicity - single exposure, Category 3, Central nervous system
   Chronic aquatic toxicity, Category 2
   H225: Highly flammable liquid and vapour.
   H315: Causes skin irritation.
   H319: Causes serious eye irritation.
   H336: May cause drowsiness or dizziness.
   H411: Toxic to aquatic life with long lasting effects.

   Classification (67/548/EEC, 1999/45/EC)
   Highly flammable
   Harmful
   Irritant
   Dangerous for the environment
   R11: Highly flammable.
   R20/21: Harmful by inhalation and in contact with skin.
   R36: Irritating to eyes.
   R51/53: Toxic to aquatic organisms, may cause
long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No. 1272/2008)

Hazard pictograms:
- Flammable
- Corrosive
- Environmental hazard

Signal word: Danger

Hazard statements:
- H225: Highly flammable liquid and vapour.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H411: Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:
- P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P233: Keep container tightly closed.
- P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P273: Avoid release to the environment.

Response:
- P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P370 + P378: In case of fire: Use for extinction: Dry sand.

Hazardous components which must be listed on the label:
- 141-78-6: ethyl acetate

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Classification</th>
<th>Classification</th>
<th>Concentration</th>
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<tr>
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<td>Substance</td>
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<td>(REGULATION (EC) No 1272/2008)</td>
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<tr>
<td>ethyl acetate</td>
<td>141-78-6</td>
<td>F; R11</td>
<td>Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
<td>&gt;= 15 - &lt; 20</td>
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<tr>
<td></td>
<td>205-500-4</td>
<td>Xi; R36</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>01-2119475103-46</td>
<td>R66</td>
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<td>R67</td>
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<td>xylene</td>
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<td>n-butyl acetate</td>
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<td>Asp. Tox. 1; H304</td>
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<td>202-849-4</td>
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<td></td>
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<tr>
<td>butan-1-ol</td>
<td>71-36-3</td>
<td>R10</td>
<td>Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336</td>
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<td>R67</td>
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<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>Xn; R65</td>
<td>Flam. Liq. 3; H226 Asp. Tox. 1; H304</td>
<td>&gt;= 1 - &lt; 10</td>
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<tr>
<td></td>
<td>265-150-3</td>
<td>R10</td>
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<td></td>
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</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
- Move out of dangerous area.
- Show this safety data sheet to the doctor in attendance.
- Move the victim to fresh air.
- Do not leave the victim unattended.

If inhaled:
- Consult a physician after significant exposure.
- If unconscious place in recovery position and seek medical advice.

In case of skin contact:
- If skin irritation persists, call a physician.
- If on skin, rinse well with water.
- If on clothes, remove clothes.
- Wash off immediately with soap and plenty of water.

In case of eye contact:
- Immediately flush eye(s) with plenty of water.
- Remove contact lenses.
- Keep eye wide open while rinsing.
- If eye irritation persists, consult a specialist.
- Immediately flush eye(s) with plenty of water.

If swallowed:
- Keep respiratory tract clear.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:
- No information available.

Risks:
- No information available.
4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry sand, Special powder against metal fire

Unsuitable extinguishing media : ABC powder, Carbon dioxide (CO2), Water, Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush with water.

Use mechanical handling equipment.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store near acids. Do not store together with oxidizing and self-igniting products. Keep away from oxidising agents and strongly acid or alkaline materials. Never allow product to get in contact with water during storage. Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

German storage class : 4.1B, Flammable solid hazardous materials

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl acetate</td>
<td>141-78-6</td>
<td>TWA</td>
<td>200 ppm</td>
<td>2005-04-06</td>
<td>GB EH40</td>
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<td>ethyl acetate</td>
<td>141-78-6</td>
<td>STEL</td>
<td>400 ppm</td>
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<td>GB EH40</td>
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<table>
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<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
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</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>TWA</td>
<td>50 ppm 220 mg/m3</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>
Sample Agent Alu Zinc 100 750 ml 17-09016

Further information
Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

<table>
<thead>
<tr>
<th>xylene</th>
<th>1330-20-7</th>
<th>STEL</th>
<th>100 ppm</th>
<th>441 mg/m³</th>
<th>2005-04-06</th>
<th>GB EH40</th>
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</thead>
</table>
| Further information
Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

<table>
<thead>
<tr>
<th>xylene</th>
<th>1330-20-7</th>
<th>TWA</th>
<th>50 ppm</th>
<th>221 mg/m³</th>
<th>2000-06-16</th>
<th>2000/39/EC</th>
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| Further information
Identifies the possibility of significant uptake through the skin
Indicative

<table>
<thead>
<tr>
<th>xylene</th>
<th>1330-20-7</th>
<th>STEL</th>
<th>100 ppm</th>
<th>442 mg/m³</th>
<th>2000-06-16</th>
<th>2000/39/EC</th>
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</thead>
</table>
| Further information
Identifies the possibility of significant uptake through the skin
Indicative

Components | CAS-No. | Value type (Form of exposure) | Control parameters | Update | Basis |
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</tr>
</thead>
<tbody>
<tr>
<td>zinc</td>
<td>7440-66-6</td>
<td>TWA (Inhalable)</td>
<td>10 mg/m³</td>
<td>2011-12-01</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>
| Further information
The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

| zinc      | 7440-66-6 | TWA (Respirable) | 4 mg/m³ | 2011-12-01 | GB EH40 |
| Further information
The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.
### Sample Agent Alu Zinc 100 750 ml 17-09016

**Version 1.0**  
**Revision Date 13.01.2014**  
**Print Date 20.11.2018**

<table>
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<th>Parameters</th>
<th>Update</th>
<th>Basis</th>
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<td>500 ppm</td>
<td>1,210 mg/m³</td>
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<td>Value type</td>
<td>Control parameters</td>
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<td>TWA (Inhalable)</td>
<td>10 mg/m³</td>
<td>2011-12-01</td>
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</table>

**Further information**

The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

| Components CAS-No. | Value type | Control parameters | Update | Basis |
| aluminium 7429-90-5 | TWA (Respirable) | 4 mg/m³ | 2011-12-01 | GB EH40 |

**Further information**

The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

| Components CAS-No. | Value type | Control parameters | Update | Basis |
| aluminium 7429-90-5 | TWA (Inhalable) | 10 mg/m³ | 2005-04-06 | GB EH40 |
## Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust.

The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

<table>
<thead>
<tr>
<th>aluminium (7429-90-5)</th>
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<th>4 mg/m³</th>
<th>GB EH40</th>
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<tr>
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<td>4 mg/m³</td>
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### Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’. Inhalable dust approximates to the fraction of airborne material that enters
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<table>
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<th>CAS-No.</th>
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<th>Control parameters</th>
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<th>Basis</th>
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<td>ethylbenzene</td>
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<td>TWA</td>
<td>100 ppm 442 mg/m³</td>
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<td>2000/39/EC</td>
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Further information
Identifies the possibility of significant uptake through the skin.

Indicative

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Further information
Identifies the possibility of significant uptake through the skin.

Indicative

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<th>Components</th>
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<th>Value type (Form of exposure)</th>
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<tbody>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>TWA</td>
<td>100 ppm 441 mg/m³</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information
Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>STEL</td>
<td>125 ppm 552 mg/m³</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information
Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>butan-1-ol</td>
<td>71-36-3</td>
<td>STEL</td>
<td>50 ppm 154 mg/m³</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information
Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

**DNEL:**

<table>
<thead>
<tr>
<th>ethyl acetate (141-78-6)</th>
<th>End Use: Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure routes: Inhalation</td>
</tr>
</tbody>
</table>
Potential health effects: short term – local effects
Value: 1468 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Workers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 1468 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – local effects
Value: 734 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Workers
Exposure routes: Skin contact
Potential health effects: long term – systemic effects
Value: 63 mg/kg

**DNEL:**
ethyl acetate (141-78-6)

End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 734 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 734 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 734 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: long term – local effects
Value: 367 mg/m³

**DNEL:**
ethyl acetate (141-78-6)

End Use: Consumers
Exposure routes: Skin contact
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Potential health effects: long term – systemic effects
Value: 37 mg/kg

**DNEL:**
ethyl acetate (141-78-6) End Use: Consumers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 367 mg/m³

**DNEL:**
ethyl acetate (141-78-6) End Use: Consumers
Exposure routes: Ingestion
Potential health effects: long term – systemic effects
Value: 4.5 mg/kg

**DNEL:**
xylene (1330-20-7) End Use: Workers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 289 mg/m³

**DNEL:**
xylene (1330-20-7) End Use: Workers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 289 mg/m³

**DNEL:**
xylene (1330-20-7) End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 77 mg/m³

**DNEL:**
xylene (1330-20-7) End Use: Workers
Exposure routes: Skin contact
Potential health effects: long term – systemic effects
Value: 180 mg/kg

**DNEL:**
xylene (1330-20-7) End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 174 mg/m³

**DNEL:**
xylene (1330-20-7) End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 174 mg/m³

**DNEL:**
xylene (1330-20-7)  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: long term – systemic effects  
Value: 108 mg/kg

**DNEL:**
xylene (1330-20-7)  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: long term – systemic effects  
Value: 14.8 mg/m³

**DNEL:**
xylene (1330-20-7)  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: long term – systemic effects  
Value: 1.6 mg/kg

**DNEL:**
zinc (7440-66-6)  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: long term – systemic effects  
Value: 5 mg/m³

**DNEL:**
zinc (7440-66-6)  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: long term – systemic effects  
Value: 83 mg/kg

**DNEL:**
zinc (7440-66-6)  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: long term – systemic effects  
Value: 0.83 mg/kg

**DNEL:**
zinc (7440-66-6)  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: long term – systemic effects  
Value: 83 mg/kg

**DNEL:**
zinc (7440-66-6)  
End Use: Consumers  
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 2.5 mg/m³

DNEL:
acetone (67-64-1)
End Use: Workers
Exposure routes: Skin contact
Potential health effects: long term – systemic effects
Value: 186 mg/kg

DNEL:
acetone (67-64-1)
End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 1210 mg/m³

DNEL:
acetone (67-64-1)
End Use: Consumers
Exposure routes: Ingestion
Potential health effects: long term – systemic effects
Value: 62 mg/kg

DNEL:
n-butyl acetate (123-86-4)
End Use: Workers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 960 mg/m³

DNEL:
n-butyl acetate (123-86-4)
End Use: Workers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 960 mg/m³

DNEL:
n-butyl acetate (123-86-4)
End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – local effects
Value: 480 mg/m³

**DNEL:** n-butyl acetate (123-86-4)
End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 480 mg/m³

**DNEL:** n-butyl acetate (123-86-4)
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 859.7 mg/m³

**DNEL:** n-butyl acetate (123-86-4)
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – systemic effects
Value: 859.7 mg/m³

**DNEL:** n-butyl acetate (123-86-4)
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: long term – local effects
Value: 102.34 mg/m³

**DNEL:** n-butyl acetate (123-86-4)
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 102.34 mg/m³

**DNEL:** Naphtha (petroleum), hydrotreated heavy (64742-48-9)
End Use: Workers
Exposure routes: Skin contact
Potential health effects: long term – systemic effects
Value: 300 mg/kg

**DNEL:** Naphtha (petroleum), hydrotreated heavy (64742-48-9)
End Use: Consumers
Exposure routes: Ingestion
Potential health effects: long term – systemic effects
Value: 300 mg/kg

**DNEL:** Naphtha (petroleum), hydrotreated heavy (64742-48-9)
End Use: Consumers
Exposure routes: Skin contact
<table>
<thead>
<tr>
<th>Exposure route</th>
<th>End Use</th>
<th>Potential health effects: long term – systemic effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Consumers</td>
<td>Value: 300 mg/kg</td>
<td>300 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Workers</td>
<td>Value: 900 mg/m³</td>
<td>900 mg/m³</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Consumers</td>
<td>Value: 310 mg/m³</td>
<td>310 mg/m³</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Consumers</td>
<td>Value: 55 mg/m³</td>
<td>55 mg/m³</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Consumers</td>
<td>Value: 3.125 mg/kg</td>
<td>3.125 mg/kg</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Consumers</td>
<td>Value: 300 mg/kg</td>
<td>300 mg/kg</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Consumers</td>
<td>Value: 300 mg/kg</td>
<td>300 mg/kg</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Consumers</td>
<td>Value: 300 mg/kg</td>
<td>300 mg/kg</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Consumers</td>
<td>Value: 300 mg/kg</td>
<td>300 mg/kg</td>
</tr>
</tbody>
</table>
### Potential Health Effects: Long Term - Systemic Effects

**Value:** 900 mg/m³

<table>
<thead>
<tr>
<th>Substance</th>
<th>Medium</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl acetate (141-78-6)</td>
<td>Soil</td>
<td>0.24 mg/kg</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>Soil</td>
<td>2.31 mg/kg</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>Fresh water</td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>Fresh water sediment</td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>Marine water</td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>Marine sediment</td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td>xylene (1330-20-7)</td>
<td>STP</td>
<td>6.58 mg/l</td>
</tr>
<tr>
<td>zinc (7440-66-6)</td>
<td>Fresh water</td>
<td>0.0206 mg/l</td>
</tr>
<tr>
<td>zinc (7440-66-6)</td>
<td>Fresh water sediment</td>
<td>117.8 mg/kg</td>
</tr>
<tr>
<td>zinc (7440-66-6)</td>
<td>Marine water</td>
<td>0.0061 mg/l</td>
</tr>
</tbody>
</table>
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zinc (7440-66-6)  STP
Value: 0.052 mg/l

PNEC:  
zinc (7440-66-6)  Soil
Value: 35.6 mg/kg

PNEC:  
zinc (7440-66-6)  Marine sediment
Value: 56.5 mg/kg

PNEC:  
acetone (67-64-1)  Soil
Value: 29.5 mg/kg

PNEC:  
acetone (67-64-1)  Fresh water
Value: 10.6 mg/l

PNEC:  
acetone (67-64-1)  Fresh water sediment
Value: 30.4 mg/kg

PNEC:  
acetone (67-64-1)  Marine water
Value: 1.06 mg/l

PNEC:  
acetone (67-64-1)  Marine sediment
Value: 3.04 mg/kg

PNEC:  
n-butyl acetate (123-86-4)  Soil
Value: 0.0903 mg/kg

PNEC:  
n-butyl acetate (123-86-4)  Fresh water
Value: 0.18 mg/l

PNEC:  
n-butyl acetate (123-86-4)  Fresh water sediment
Value: 0.981 mg/kg

PNEC:  
n-butyl acetate (123-86-4)  STP
Value: 35.6 mg/l

PNEC:  

n-butyl acetate (123-86-4) Marine water
Value: 0.018 mg/l

**PNEC:**

n-butyl acetate (123-86-4) Marine sediment
Value: 0.0981 mg/kg

**PNEC:**

butan-1-ol (71-36-3) Soil
Value: 0.015 mg/kg

**PNEC:**

butan-1-ol (71-36-3) Fresh water
Value: 0.082 mg/l

**PNEC:**

butan-1-ol (71-36-3) Fresh water sediment
Value: 0.178 mg/kg

**PNEC:**

butan-1-ol (71-36-3) STP
Value: 2476 mg/l

**PNEC:**

butan-1-ol (71-36-3) Marine water
Value: 0.0082 mg/l

**PNEC:**

butan-1-ol (71-36-3) Marine sediment
Value: 0.0178 mg/kg

**PNEC:**

butan-1-ol (71-36-3) Sporadic Release
Value: 2.25 mg/l

### 8.2 Exposure controls

**Personal protective equipment**

Eye protection : Eye wash bottle with pure water
Wear face-shield and protective suit for abnormal processing problems.

: Goggles

Hand protection
**Material**: Solvent-resistant gloves (butyl-rubber)

**Remarks**: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Recommended preventive skin protection
Skin should be washed after contact.

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Skin and body protection**: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Respiratory protection**: In the case of vapour formation use a respirator with an approved filter.

: Use suitable breathing protection if workplace concentration requires.

**Environmental exposure controls**

**General advice**: Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

**Water**: The product should not be allowed to enter drains, water
9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : no data available
Odour : characteristic
pH : no data available
Freezing point : no data available
Boiling point/boiling range : 55 °C
Flash point : -19 °C

Bulk density : no data available
Flammability (solid, gas) : no data available
Auto-flammability : no data available
Upper explosion limit : no data available
Lower explosion limit : no data available
Vapour pressure : no data available
Density : 1 g/cm3
Water solubility : no data available
Solubility in other solvents : no data available
Partition coefficient: n-octanol/water : no data available
Auto-ignition temperature : no data available
Thermal decomposition : no data available

Viscosity
Viscosity, dynamic : see user defined free text
Viscosity, kinematic : no data available
Flow time : no data available

9.2 Other information

no data available
SECTION 10: Stability and reactivity

10.1 Reactivity
No decomposition if stored and applied as directed.

10.2 Chemical stability
No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions
Hazardous reactions: Stable under recommended storage conditions.
Vapours may form explosive mixture with air.

10.4 Conditions to avoid
Conditions to avoid: Heat, flames and sparks.
Do not allow evaporation to dryness.

10.5 Incompatible materials
Materials to avoid: no data available

10.6 Hazardous decomposition products
Other information: no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Product
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method
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Acute inhalation toxicity

: Acute toxicity estimate: > 40 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: Calculation method

Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: Calculation method

Acute dermal toxicity

: Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Components:

1330-20-7:

Acute dermal toxicity

: Acute toxicity estimate: 1,100 mg/kg

Method: Converted acute toxicity point estimate

7440-66-6:

Acute oral toxicity

: rat: > 2,000 mg/kg

Acute inhalation toxicity

: LC50 rat: 5.41 mg/l

Exposure time: 4 h
Acute inhalation toxicity

- **7429-90-5:**
  - **Product:** May cause skin irritation in susceptible persons.

- **71-36-3:**
  - **Product:** May cause irreversible eye damage.

Skin corrosion/irritation

- **Product:** May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

- **Product:** May cause irreversible eye damage.

Respiratory or skin sensitisation

- **Product:** no data available

Carcinogenicity

- **Product:** no data available

Toxicity to reproduction/fertility

- **Product:** no data available

Reprod.Tox./Development/Teratogenicity

- **Product:** no data available

STOT - single exposure

- **Product:** no data available
STOT - repeated exposure
  no data available

Aspiration toxicity
  no data available

Further information
  Product
  Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity
  no data available

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
  no data available

12.6 Other adverse effects
Product:
Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

European Waste Catalogue: 16 05 04 - gases in pressure containers (including halons) containing dangerous substances

13.1 Waste treatment methods

Product: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number
ADR: 1263
IMDG: 1263
IATA: 1263

14.2 Proper shipping name
ADR: PAINT
IMDG: PAINT
IATA: PAINT

14.3 Transport hazard class
ADR: 3
IMDG: 3
14.4 Packing group

ADR
- Packaging group: II
- Classification Code: F1
- Hazard identification No: 33
- Labels: 3
- Tunnel restriction code: (D/E)

IMDG
- Packaging group: II
- Labels: 3
- EmS Number: F-E, S-E

IATA
- Packing instruction (cargo aircraft): 364
- Packing instruction (passenger aircraft): 353
- Packing instruction (LQ): Y341
- Packaging group: II
- Labels: 3

14.5 Environmental hazards

IMDG : Marine pollutant
ADR : Environmentally hazardous

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Water contaminating class (Germany): WGK 2 water endangering
Volatile organic compounds : 67.45 %

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of R-Phrases

R10     Flammable.
R11     Highly flammable.
R20     Harmful by inhalation.
R20/21  Harmful by inhalation and in contact with skin.
R22     Harmful if swallowed.
R34     Causes burns.
R36     Irritating to eyes.
R37/38  Irritating to respiratory system and skin.
R38     Irritating to skin.
R41     Risk of serious damage to eyes.
R50     Very toxic to aquatic organisms.

Full text of H-Statements

H225    Highly flammable liquid and vapour.
H226    Flammable liquid and vapour.
H228    Flammable solid.
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.
H318    Causes serious eye damage.
H319    Causes serious eye irritation.
H332    Harmful if inhaled.
H335    May cause respiratory irritation.
H336    May cause drowsiness or dizziness.
H400    Very toxic to aquatic life.
H410    Very toxic to aquatic life with long lasting effects.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.