S afety data sheet
according to Regulation (EC) No. 1907/2006

Sample Concentrate AluZinc Spray 750 ml 14-09024

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

1.1 Product identifier
Trade name: Sample Concentrate AluZinc Spray 750 ml 14-09024
Material number: 08329107Z

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 of person responsible for the SDS: msds.eckart@altana.com

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 3
H226: Flammable liquid and vapour.
Skin irritation, Category 2
H315: Causes skin irritation.
Serious eye damage, Category 1
H318: Causes serious eye damage.
Chronic aquatic toxicity, Category 2
H411: Toxic to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)
Flammable
R10: Flammable.
Harmful
R20/21: Harmful by inhalation and in contact with skin.

Dangerous for the environment
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Irritant
R38: Irritating to skin.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms: ☑ ☑ ☑

Signal word: Danger

Hazard statements:
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
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.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Hazardous components which must be listed on the label:
71-36-3 butan-1-ol

2.3 Other hazards
No information available.
## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Registration number</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7 215-535-7</td>
<td>R10 Xn; R20/21 Xi; R38</td>
<td>Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304</td>
<td>&gt;= 20 - &lt; 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>zinc powder - zinc dust (stabilized)</td>
<td>7440-66-6 231-175-3 01-2119467174-37</td>
<td>N; R50-R53</td>
<td>Aquatic Acute 1; H400 Aquatic Chronic 1; H410</td>
<td>&gt;= 20 - &lt; 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>123-86-4 204-658-1 01-2119485493-29</td>
<td>R10 R66 R67</td>
<td>Flam. Liq. 3; H226 STOT SE 3; H336</td>
<td>&gt;= 15 - &lt; 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5 231-072-3 01-2119529243-45</td>
<td>F; R11</td>
<td>Flam. Sol. 1; H228</td>
<td>&lt; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low boiling point hydrogen treated naphtha</td>
<td>64742-48-9 265-150-3</td>
<td>Xn; R65</td>
<td>Asp. Tox. 1; H304</td>
<td>&gt;= 1 - &lt; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4 202-849-4 01-2119489370-35</td>
<td>F; R11 Xn; R20-R48/20-R65</td>
<td>Flam. Liq. 2; H225 Acute Tox. 4; H332</td>
<td>&lt; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>71-36-3 200-751-6 01-2119484630-38</td>
<td>R10 Xn; R22 Xi; R37/38-R41 R67</td>
<td>Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336</td>
<td>&gt;= 3 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low boiling point hydrogen treated naphtha</td>
<td>64742-48-9 265-150-3</td>
<td>Xn; R65 R10</td>
<td>Flam. Liq. 3; H226 Asp. Tox. 1; H304</td>
<td>&gt;= 1 - &lt; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quaternary ammonium compounds, coco alkylethyl-dimethyl, Et sulfates</td>
<td>68308-64-5 269-662-8</td>
<td>Xn-C-N; R22-R34-R50</td>
<td>Acute Tox. 4; H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400</td>
<td>&gt;= 0.25 - &lt; 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

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

If inhaled: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 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 induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

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.
SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

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Version 2.1 Revision Date: 01.09.2015 MSDS Number: 102000005078 Print Date: 20.11.2018 Date of first issue: 28.01.2014

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Dry sand
ABC powder
Foam

Unsuitable extinguishing media: Water

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 firefighting 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.
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 material 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, ver-
miculite) 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 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.
To avoid spills during handling keep bottle on a metal tray.
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). 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 stor-
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

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Version  2.1  Revision Date: 01.09.2015  MSDS Number: 102000005078  Print Date: 20.11.2018  Date of first issue: 28.01.2014

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

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>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>xylene</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Further information</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Further information</td>
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<tr>
<td>Further information</td>
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<tr>
<td></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/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 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 Concentrate AluZinc Spray 750 ml 14-09024**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>TWA (Inhalable)</th>
<th>STEL (Inhalable)</th>
<th>TWA (Respirable)</th>
<th>STEL (Respirable)</th>
<th>WEL (Inhalable)</th>
<th>WEL (Respirable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-butyl acetate</td>
<td>123-86-4</td>
<td></td>
<td>150 ppm</td>
<td>200 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>724 mg/m³</td>
<td>966 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aluminium powder</td>
<td>7429-90-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(stabilised)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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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/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 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.
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<table>
<thead>
<tr>
<th>TWA (Respirable dust)</th>
<th>4 mg/m(^3)</th>
<th>GB EH40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>TWA (Inhalable dust)</th>
<th>10 mg/m(^3)</th>
<th>GB EH40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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ble’ 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>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>Workers</td>
<td>Inhalation</td>
<td>short term – local effects</td>
<td>289 mg/m3</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>180 mg/kg</td>
</tr>
<tr>
<td>Consumer/Worker</td>
<td>Route of Exposure</td>
<td>Duration</td>
<td>Effect</td>
<td>Concentration</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------</td>
<td>----------</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>short term – local effects</td>
<td>174 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>short term – systemic effects</td>
<td>174 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>108 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>14.8 mg/m³</td>
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<tr>
<td>Consumers</td>
<td>Ingestion</td>
<td>long term – systemic effects</td>
<td>1.6 mg/kg</td>
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</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>83 mg/kg</td>
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<tr>
<td>Consumers</td>
<td>Ingestion</td>
<td>long term – systemic effects</td>
<td>0.83 mg/kg</td>
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<tr>
<td>Consumers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>83 mg/kg</td>
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<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>2.5 mg/m³</td>
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</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>short term – local effects</td>
<td>960 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>short term – systemic effects</td>
<td>960 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – local effects</td>
<td>480 mg/m³</td>
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</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>480 mg/m³</td>
<td></td>
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<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>short term – local effects</td>
<td>859.7 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>short term – systemic effects</td>
<td>859.7 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – local effects</td>
<td>102.34 mg/m³</td>
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</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>102.34 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy (64742-48-9)</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>300 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Ingestion</td>
<td>long term – systemic effects</td>
<td>300 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Consumers</th>
<th>Skin contact</th>
<th>long term – systemic effects</th>
<th>300 mg/kg</th>
</tr>
</thead>
</table>

butan-1-ol (71-36-3)Workers | Inhalation | long term – local effects | 900 mg/m³ |

Consumers | Inhalation | long term – local effects | 310 mg/m³ |

Consumers | Inhalation | long term – local effects | 55 mg/m³ |

Consumers | Ingestion | long term – systemic effects | 3.125 kg/kg |

Naphtha (petroleum), hydrotreated heavy (64742-48-9)Workers | Skin contact | long term – systemic effects | 300 mg/kg |

Consumers | Ingestion | long term – systemic effects | 300 mg/kg |

Consumers | Skin contact | long term – systemic effects | 300 mg/kg |

Consumers | Inhalation | long term – systemic effects | 900 mg/m³ |

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene (1330-20-7)</td>
<td>Soil</td>
<td>2.31 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.327 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>12.46 mg/kg</td>
</tr>
<tr>
<td></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></td>
<td>Fresh water sediment</td>
<td>117.8 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.0061 mg/l</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>0.052 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>35.6 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>56.5 mg/kg</td>
</tr>
<tr>
<td>n-butyl acetate (123-86-4)</td>
<td>Soil</td>
<td>0.0903 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>0.18 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>0.981 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>35.6 mg/l</td>
</tr>
</tbody>
</table>
Marine water | 0.018 mg/l |
| Marine sediment | 0.0981 mg/kg |
| butan-1-ol (71-36-3) | |
| Soil | 0.015 mg/kg |
| Fresh water | 0.082 mg/l |
| Fresh water sediment | 0.178 mg/kg |
| STP | 2476 mg/l |
| Marine water | 0.0082 mg/l |
| Marine sediment | 0.0178 mg/kg |
| Sporadic Release | 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.

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 break-through 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 workplace.

Respiratory protection: Use suitable breathing protection if workplace concentration requires.

Environmental exposure controls

Water: The product should not be allowed to enter drains, water
courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance**: liquid
- **Colour**: No data available
- **Odour**: characteristic
- **Odour Threshold**: No data available
- **pH**: No data available
- **Freezing point**: No data available
- **Boiling point/boiling range**: 116 °C
- **Flash point**: 27 °C

- **Evaporation rate**: 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
- **Relative vapour density**: No data available
- **Relative density**: No data available
- **Density**: ca. 1.11 g/cm³
- **Bulk density**: No data available
- **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
- **Decomposition temperature**: No data available
- **Viscosity**: see user defined free text
- **Viscosity, dynamic**: No data available
- **Viscosity, kinematic**: 15 - 30 s at 20 °C
  - **Flow time**: Cross section: 4 mm
  - **Method**: DIN 53211

- **Explosive properties**: No data available
- **Oxidizing properties**: 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: Contact with acids and alkalis may release hydrogen.

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: Acids, Bases, Oxidizing agents

10.6 Hazardous decomposition products
Contact with water or humid air: This information is not available.

Thermal decomposition: This information is not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

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

Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

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: > 2,000 mg/kg  
Method: Calculation method

Acute toxicity estimate: 4,798 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

**7429-90-5:**
- Acute inhalation toxicity: LC50 (Rat): > 5 mg/l  
  Exposure time: 4 h  
  Test atmosphere: dust/mist

**64742-48-9:**
- Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
- Acute inhalation toxicity: LC50 (Rat): Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
- Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg

**100-41-4:**
- Acute oral toxicity: LD50 (Rat): 3,500 mg/kg
- Acute dermal toxicity: LD50 (Rabbit): 5,000 mg/kg

**71-36-3:**
- Acute oral toxicity: Acute toxicity estimate: 500 mg/kg  
  Method: Converted acute toxicity point estimate

**64742-48-9:**
- Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 4,951 mg/l  
  Exposure time: 4 h  
  Test atmosphere: vapour
- Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg
Skin corrosion/irritation

**Product:**
Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

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

**Components:**
1330-20-7:
Result: Eye irritation

Respiratory or skin sensitisation

**Components:**
1330-20-7:
Assessment: Harmful in contact with skin or if inhaled

STOT - single exposure

**Components:**
1330-20-7:
Assessment: May cause respiratory irritation.

STOT - repeated exposure

**Components:**
1330-20-7:
Assessment: May cause damage to organs through prolonged or repeated exposure.

**Components:**
1330-20-7:

Aspiration toxicity

**Components:**
1330-20-7:
May be fatal if swallowed and enters airways.

Further information

**Product:**
Remarks: Solvents may degrease the skin.

**Components:**
64742-48-9:
Section 12: Ecological Information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
Components:
123-86-4:
Partition coefficient: n-octanol/water: log Pow: 2.3

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
Not relevant

12.6 Other adverse effects

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

Components:
64742-48-9:
Additional ecological information: Remarks: No data available

Section 13: Disposal Considerations

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.

Remarks: Solvents may degrease the skin.
SECTION 14: Transport information

14.1 UN number

ADR: UN 1263
IMDG: UN 1263
IATA: UN 1263

14.2 UN proper shipping name

ADR: PAINT
IMDG: PAINT (Zinc powder, stabilized)
IATA: Paint

14.3 Transport hazard class(es)

ADR: 3
IMDG: 3
IATA: 3

14.4 Packing group

ADR
Packing group: III
Classification Code: F1
Hazard Identification Number: 30
Labels: 3
Tunnel restriction code: (D/E)

IMDG
Packing group: III
Labels: 3

IATA
Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355
Packing instruction (LQ): Y344
Packing group: III
Labels: Flammable Liquids

14.5 Environmental hazards

ADR
Environmentally hazardous: yes

IMDG
Marine pollutant: yes
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Sample Concentrate AluZinc Spray 750 ml 14-09024

Version: 2.1  Revision Date: 01.09.2015  MSDS Number: 102000005078  Print Date: 20.11.2018  Date of first issue: 28.01.2014

14.6 Special precautions for user
Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Water contaminating class (Germany) : WGK 2 water endangering

15.2 Chemical Safety Assessment
This information is not 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.
R37/38 : Irritating to respiratory system and skin.
R38 : Irritating to skin.
R41 : Risk of serious damage to eyes.
R48/20 : Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50 : Very toxic to aquatic organisms.
R53 : May cause long-term adverse effects in the aquatic environment.
R65 : Harmful: may cause lung damage if swallowed.
R66 : Repeated exposure may cause skin dryness or cracking.
R67 : Vapours may cause drowsiness and dizziness.

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.
**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**Sample Concentrate AluZinc Spray 750 ml 14-09024**

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>MSDS Number:</th>
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<td>2.1</td>
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<td>20.11.2018</td>
<td>28.01.2014</td>
</tr>
</tbody>
</table>

- **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.
- **H373**: May cause damage to organs through prolonged or repeated exposure.
- **H400**: Very toxic to aquatic life.
- **H410**: Very toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

- **Acute Tox.**: Acute toxicity
- **Aquatic Acute**: Acute aquatic toxicity
- **Aquatic Chronic**: Chronic aquatic toxicity
- **Asp. Tox.**: Aspiration hazard
- **Eye Dam.**: Serious eye damage
- **Eye Irrit.**: Eye irritation
- **Flam. Liq.**: Flammable liquids
- **Flam. Sol.**: Flammable solids
- **Skin Corr.**: Skin corrosion
- **Skin Irrit.**: Skin irritation
- **STOT RE**: Specific target organ toxicity - repeated exposure
- **STOT SE**: Specific target organ toxicity - single exposure

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50 % of a test population; MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philip-
Further information

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