SAFETY DATA SHEET
1 PACK ETCH PRIMER CT (General colours)

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: 1 PACK ETCH PRIMER CT (General colours)
Product No.: EPCT/GENERAL

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

Identified uses: An air-drying, liquid, solvent-borne, primer for industrial and professional use. For metal finishing, vehicle refinishing, the original coating of vehicles or trailers and articles (inside or outside buildings) and which are not part of the building structure. Apply by manual spray or brush (for small areas). This product may be force dried (50-80°C).

1.3. Details of the supplier of the safety data sheet

Supplier: Manor Coating Systems Ltd
Otley Road
Shipley
West Yorkshire
BD17 7DP
Tel: 01274 587351
Fax: 01274531360
chiefchemist@manorcoatingsystems.co.uk

Contact Person: Chief Chemist

1.4. Emergency telephone number

Manor Coating Systems Ltd. 01274 587351 may be contacted (Office hours only)

National Emergency Telephone Number
Members of the public should contact:
In England and Wales: NHS Direct 0845 4647 or 111
In Scotland: NHS24 08454 24 24 24
In Republic of Ireland: 01 809 2166

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture


Human health
Splashes in the eye may cause serious irritation.

Environment
The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards
The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

2.2. Label elements

Contains: BUTANOL-norm
METHANOL
PHENOL

Labelling:

Harmful
Highly flammable
1 PACK ETCH PRIMER CT (General colours)

Risk Phrases
R11 Highly flammable
R22 Harmful if swallowed.
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.

Safety Phrases
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S33 Take precautionary measures against static discharges.
S23 Do not breathe vapour/spray.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S24/25 Avoid contact with skin and eyes.
S37/39 Wear suitable gloves and eye/face protection.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
P14 Contains FORMALDEHYDE ...%. May produce an allergic reaction.

2.3. Other hazards
This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>PROPA-2 OL</th>
<th>10 - &lt;25%</th>
</tr>
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<tbody>
<tr>
<td>CAS-No.: 67-63-0</td>
<td>EC No.: 200-661-7</td>
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<tr>
<td>Classification (EC 1272/2008)</td>
<td>Classification (67/548/EEC)</td>
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<tr>
<td>Flam. Liq. 2 - H225</td>
<td>F;R11</td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td>Xi;R36</td>
</tr>
<tr>
<td>STOT SE 3 - H336</td>
<td>R67</td>
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<table>
<thead>
<tr>
<th>ETHANOL</th>
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<tr>
<td>CAS-No.: 64-17-5</td>
<td>EC No.: 200-578-6</td>
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<td>Classification (67/548/EEC)</td>
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<tr>
<td>Flam. Liq. 2 - H225</td>
<td>F;R11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUTANOL-norm</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 71-36-3</td>
<td>EC No.: 200-751-6</td>
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<tr>
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<td>Classification (67/548/EEC)</td>
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<tr>
<td>Flam. Liq. 3 - H226</td>
<td>R10</td>
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<tr>
<td>Acute Tox. 4 - H302</td>
<td>Xn;R22</td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td>Xi;R37/38;R41</td>
</tr>
<tr>
<td>Eye Dam. 1 - H318</td>
<td>R67</td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H336</td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>1-METHOXY-2-PROpanOL</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>ZINC BORATE</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>2-METHYLPROPAN-1-OL</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>METHANOL</td>
<td>0.1 - &lt;1%</td>
</tr>
<tr>
<td>PHOSPHORIC ACID</td>
<td>0.1 - &lt;1%</td>
</tr>
<tr>
<td>PHENOL</td>
<td>0.1 - &lt;1%</td>
</tr>
</tbody>
</table>

1 PACK ETCH PRIMER CT (General colours)
**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures**

**General information**
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

**Inhalation**
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

**Ingestion**
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

**Skin contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

**Eye contact**
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

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

**Inhalation**
In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

**Ingestion**
Ingestion may cause nausea, diarrhoea and vomiting.

**Skin contact**
Prolonged or repeated contact with skin may cause soreness, irritation or dry skin due to a defatting action.

**Eye contact**
The liquid splashed in the eyes may cause irritation and reversible damage.

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

No specific first aid measures noted.

**SECTION 5: FIREFIGHTING MEASURES**

**5.1. Extinguishing media**

Extinguishing media recommended: alcohol resistant foam, CO2, powders, water spray/mist
**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

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

**Unusual Fire & Explosion Hazards**
Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard.
Appropriate breathing apparatus may be required.

**5.3. Advice for firefighters**

**Special Fire Fighting Procedures**
Cool closed containers exposed to fire with water.
Do not allow run-off from fire fighting to enter drains or water courses.

**Protective equipment for fire-fighters**
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**
Exclude sources of ignition and ventilate the area.
Avoid breathing vapours.
Refer to protective measures listed in sections 7 and 8.

**6.2. Environmental precautions**
Do not allow to enter drains or watercourses.
If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

**6.3. Methods and material for containment and cleaning up**
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).
Clean preferably with a detergent - avoid use of solvents.

**6.4. Reference to other sections**
For personal protection, see section 8. Collect and dispose of spillage as indicated in section 13.

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**SECTION 7: HANDLING AND STORAGE**

**7.1. Precautions for safe handling**
The Manual Handling Operations Regulations may apply to the handling of containers of this product.
To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in Section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
Electrical equipment should be protected to the appropriate standard.
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
Operators should wear anti-static footwear and clothing and floors should be of the conducting type.
Isolate from sources of heat, sparks and open flame.
Non-sparking tools should be used.
Avoid skin and eye contact.
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture.
Avoid inhalation of dust from sanding.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty: container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or water courses.
Information on fire and explosion protection.
Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.
When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air breathing apparatus during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

**7.2. Conditions for safe storage, including any incompatibilities**
1 PACK ETCH PRIMER CT (General colours)

Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR.

The principles contained in the HSE guidance note Chemical Warehousing: The Storage of Packaged Dangerous Substances, should be observed when storing this product.

Notes on joint storage.

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Additional information on storage conditions

Observe label precautions.

Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition.

No smoking.

Prevent unauthorised access.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA - 8 Hrs</th>
<th>STEL - 15 Min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-METHOXY-2-PROPANOL</td>
<td>WEL</td>
<td>100 ppm(Sk)</td>
<td>375 mg/m3(Sk)</td>
<td>150 ppm(Sk)</td>
</tr>
<tr>
<td>2-METHYLPROPAN-1-OL</td>
<td>WEL</td>
<td>50 ppm</td>
<td>154 mg/m3</td>
<td>75 ppm</td>
</tr>
<tr>
<td>BUTANOL-norm</td>
<td>WEL</td>
<td>50 ppm</td>
<td>154 mg/m3</td>
<td>Sk</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>WEL</td>
<td>1000 ppm</td>
<td>1920 mg/m3</td>
<td></td>
</tr>
<tr>
<td>FORMALDEHYDE ...%</td>
<td>WEL</td>
<td>2 ppm</td>
<td>2.5 mg/m3</td>
<td>2 ppm</td>
</tr>
<tr>
<td>METHANOL</td>
<td>WEL</td>
<td>200 ppm</td>
<td>266 mg/m3</td>
<td>250 ppm</td>
</tr>
<tr>
<td>PHENOL</td>
<td>WEL</td>
<td>2 ppm</td>
<td>7,8 mg/m3</td>
<td>4 ppm</td>
</tr>
<tr>
<td>PHOSPHORIC ACID ...%</td>
<td>WEL</td>
<td>1 mg/m3</td>
<td>2 mg/m3</td>
<td></td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>WEL</td>
<td>400 ppm</td>
<td>999 mg/m3</td>
<td>500 ppm</td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.
### PHOSPHORIC ACID 85% (CAS: 7664-38-2)

**Industry**
- **Inhalation.**
  - Long Term Local Effects: 1 mg/m³
  - Short Term Local Effects: 2 mg/m³
  - Local Effects: No-threshold effect as

**Consumer**
- **Inhalation.**
  - Long Term Local Effects: 0.73 mg/m³
  - Short Term Local Effects: No-threshold effect as

**Dermal**
- **Long Term Local Effects:**
  - Industry: No-threshold effect as
  - Consumer: No-threshold effect as

**Oral**
- **Short Term Local Effects:**
  - Industry: No-threshold effect as

### METHANOL (CAS: 67-56-1)

**Industry**
- **Dermal**
  - Long Term Systemic Effects: 40 mg/kg/day
- **Inhalation.**
  - Long Term Systemic Effects: 260 mg/m³
  - Short Term Local Effects: 8 mg/kg/day
- **Dermal**
  - Long Term Systemic Effects: 50 mg/m³
- **Inhalation.**
  - Long Term Systemic Effects: 50 mg/m³
- **Oral**
  - Long Term Systemic Effects: 8 mg/kg/day

**Consumer**
- **Dermal**
  - Long Term Systemic Effects: 8 mg/kg/day
- **Inhalation.**
  - Short Term Local Effects: 950 mg/m³
- **Oral**
  - Long Term Systemic Effects: 8 mg/kg/day

<table>
<thead>
<tr>
<th>PNEC</th>
<th>Freshwater</th>
<th>154 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marinewater</td>
<td>15.4 mg/l</td>
</tr>
<tr>
<td></td>
<td>Sediment</td>
<td>570.4 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>23.5 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>100 mg/l</td>
</tr>
</tbody>
</table>

### ETHANOL (CAS: 64-17-5)

**Industry**
- **Inhalation.**
  - Long Term Systemic Effects: 343 mg/kg/day
- **Dermal**
  - Long Term Systemic Effects: 950 mg/m³
- **Inhalation.**
  - Long Term Systemic Effects: 1900 mg/m³
- **Dermal**
  - Long Term Systemic Effects: 50 mg/m³
- **Inhalation.**
  - Long Term Systemic Effects: 50 mg/m³
- **Oral**
  - Long Term Systemic Effects: 87 mg/kg/day

**Consumer**
- **Inhalation.**
  - Long Term Systemic Effects: 950 mg/m³

<table>
<thead>
<tr>
<th>PNEC</th>
<th>Freshwater</th>
<th>96 mg/l</th>
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<tbody>
<tr>
<td></td>
<td>Marinewater</td>
<td>0.79 mg/l</td>
</tr>
<tr>
<td></td>
<td>Sediment</td>
<td>3.6 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0.63 mg/kg</td>
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</tbody>
</table>

### PROPAN-2-OL (CAS: 67-63-0)

**Industry**
- **Inhalation.**
  - Long Term Systemic Effects: 500 mg/m³
- **Dermal**
  - Long Term Systemic Effects: 888 mg/m³
- **Inhalation.**
  - Long Term Systemic Effects: 89
- **Dermal**
  - Long Term Systemic Effects: 319 mg/kg/day
- **Oral**
  - Long Term Systemic Effects: 26 mg/kg/day

**Consumer**
- **Inhalation.**
  - Long Term Systemic Effects: 3125 mg/kg/day

<table>
<thead>
<tr>
<th>PNEC</th>
<th>Freshwater</th>
<th>140.9 mg/l</th>
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<tbody>
<tr>
<td></td>
<td>Marinewater</td>
<td>140.9 mg/l</td>
</tr>
<tr>
<td></td>
<td>Intermittent release</td>
<td>140.9 mg/l</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>2251 mg/l</td>
</tr>
<tr>
<td></td>
<td>Sediment</td>
<td>552 mg/kg</td>
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<tr>
<td></td>
<td>Sediment (Freshwater)</td>
<td>552 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>28 mg/kg</td>
</tr>
</tbody>
</table>

### BUTANOL-norm (CAS: 71-36-3)

**Industry**
- **Inhalation.**
  - Long Term Local Effects: 310 mg/m³
- **Inhalation.**
  - Long Term Local Effects: 55 mg/m³
- **Inhalation.**
  - Local Effects: 3125 mg/kg/day

**Consumer**
- **Inhalation.**
  - Long Term Systemic Effects: 100 ppm

<table>
<thead>
<tr>
<th>PNEC</th>
<th>Freshwater</th>
<th>0.082 mg/l</th>
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<td>Marinewater</td>
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<td></td>
<td>STP</td>
<td>2746 mg/l</td>
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<tr>
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<td>Sediment</td>
<td>0.178 mg/kg</td>
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<tr>
<td></td>
<td>Sediment (Freshwater)</td>
<td>0.0178 mg/kg</td>
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<tr>
<td></td>
<td>Soil</td>
<td>0.015 mg/kg</td>
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### 2-METHYLPROPAN-1-OL (CAS: 78-83-1)

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<tbody>
<tr>
<td>Industry Inh. Long T.</td>
<td>310 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Consumer Inh. Long T.</td>
<td>55 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>2.25 mg/l</td>
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</table>

<table>
<thead>
<tr>
<th>PNEC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Freshwater 0.4</td>
<td>mg/l</td>
</tr>
<tr>
<td>Marinnerwater 0.04</td>
<td>mg/l</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>11 mg/l</td>
</tr>
<tr>
<td>Sediment (Freshwater)</td>
<td>1.52 mg/kg</td>
</tr>
<tr>
<td>Sediment (Marinner)</td>
<td>0.152 mg/kg</td>
</tr>
<tr>
<td>Soil</td>
<td>0.0699 mg/kg</td>
</tr>
</tbody>
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### 1-METHOXY-2-PROpanOL (CAS: 107-98-2)

<table>
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</thead>
<tbody>
<tr>
<td>Industry Inh. Long T.</td>
<td>553.5 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>50.6 mg/kg/day Local Effects</td>
</tr>
<tr>
<td>Industry Inh. Long T.</td>
<td>369 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Consumer Derm. Long T.</td>
<td>18.1 mg/kg/day Local Effects</td>
</tr>
<tr>
<td>Consumer Inh. Long T.</td>
<td>43.9 mg/m³ Local Effects</td>
</tr>
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<table>
<thead>
<tr>
<th>PNEC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Freshwater 10</td>
<td>mg/l</td>
</tr>
<tr>
<td>Marinnerwater 1</td>
<td>mg/l</td>
</tr>
<tr>
<td>STP 100</td>
<td>mg/l</td>
</tr>
<tr>
<td>Soil 2.47</td>
<td>mg/l</td>
</tr>
<tr>
<td>Sediment Freshwater</td>
<td>41.6 mg/kg</td>
</tr>
<tr>
<td>Sediment Marine water</td>
<td>4.17 mg/kg</td>
</tr>
</tbody>
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### PHENOL (CAS: 108-95-2)

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</thead>
<tbody>
<tr>
<td>Industry Inh. Long T.</td>
<td>8 mg/m³ Systemic Effects</td>
</tr>
<tr>
<td>Industry Inh. Short T.</td>
<td>16 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>1.23 mg/kg/day Systemic Effects</td>
</tr>
<tr>
<td>Consumer Inh. Long T.</td>
<td>1.32 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Consumer Derm. Long T.</td>
<td>0.4 mg/kg/day Systemic Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PNEC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater 0.0077</td>
<td>mg/l</td>
</tr>
<tr>
<td>Marinnerwater 0.00077</td>
<td>mg/l</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>0.031 mg/l</td>
</tr>
<tr>
<td>Water 2.1</td>
<td>mg/l</td>
</tr>
<tr>
<td>Sediment Freshwater</td>
<td>0.0915 mg/kg</td>
</tr>
<tr>
<td>Sediment Marinner</td>
<td>0.00915 mg/kg</td>
</tr>
<tr>
<td>Soil 0.0136</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

### FORMALDEHYDE (CAS: 50-00-0)

<table>
<thead>
<tr>
<th>DNEL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Inh. Long T.</td>
<td>9 mg/m³ Systemic Effects</td>
</tr>
<tr>
<td>Industry Inh. Short T.</td>
<td>0.5 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>1 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>240 mg/kg/day Systemic Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>37 µg/m² Local Effects</td>
</tr>
<tr>
<td>Consumer Inh. Long T.</td>
<td>3.2 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Consumer Derm. Long T.</td>
<td>102 mg/kg/day Local Effects</td>
</tr>
<tr>
<td>Consumer Derm. Short T.</td>
<td>12 µg/m² Local Effects</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>PNEC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater 0.47</td>
<td>mg/l</td>
</tr>
<tr>
<td>Marinnerwater 0.47</td>
<td>mg/l</td>
</tr>
<tr>
<td>Sediment Freshwater</td>
<td>2.44 mg/kg</td>
</tr>
<tr>
<td>Sediment Marinner</td>
<td>2.44 mg/kg</td>
</tr>
<tr>
<td>Soil 0.21</td>
<td>mg/kg</td>
</tr>
<tr>
<td>STP 0.19</td>
<td>mg/l</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>4.7 mg/l</td>
</tr>
</tbody>
</table>

### ZINC BORATE (CAS: 51201-70-8)

<table>
<thead>
<tr>
<th>DNEL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Inh. Long T.</td>
<td>8.75 mg/m³ Systemic Effects</td>
</tr>
<tr>
<td>Industry Derm. Long T.</td>
<td>250 mg/kg/day Systemic Effects</td>
</tr>
<tr>
<td>Consumer Inh. Long T.</td>
<td>2.19 mg/m³ Local Effects</td>
</tr>
<tr>
<td>Consumer Derm. Long T.</td>
<td>125 mg/kg/day Local Effects</td>
</tr>
<tr>
<td>Consumer Oral Long T.</td>
<td>0.25 mg/kg/day Systemic Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PNEC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater 0.47</td>
<td>mg/l</td>
</tr>
<tr>
<td>Marinnerwater 0.47</td>
<td>mg/l</td>
</tr>
<tr>
<td>Sediment Freshwater</td>
<td>2.44 mg/kg</td>
</tr>
<tr>
<td>Sediment Marinner</td>
<td>2.44 mg/kg</td>
</tr>
<tr>
<td>Soil 0.21</td>
<td>mg/kg</td>
</tr>
<tr>
<td>STP 0.19</td>
<td>mg/l</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>4.7 mg/l</td>
</tr>
</tbody>
</table>
## 1 PACK ETCH PRIMER CT (General colours)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Marinewater</td>
<td>1.35</td>
<td>mg/l</td>
</tr>
<tr>
<td>Intermittent release</td>
<td>9.1</td>
<td>mg/l</td>
</tr>
<tr>
<td>STP</td>
<td>1.75</td>
<td>mg/l</td>
</tr>
<tr>
<td>Sediment (Freshwater)</td>
<td>1.8</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Sediment (Marinewater)</td>
<td>1.8</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Soil</td>
<td>5.4</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

#### Protective equipment

**Process conditions**
Provide eyewash station.

**Engineering measures**
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

If these are not sufficient to maintain concentrations of solvent vapour below the OEL, suitable respiratory protection must be worn.

Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

See Respiratory Equipment below.

**Respiratory equipment**
Compressed air breathing apparatus should be worn by spray operators even when good ventilation is provided.

In other operations, if workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators.

**Hand protection**
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling, use chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from Viton or PVA barrier material.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance and effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

**Eye protection**
Use safety eyewear, manufactured/tested to EN 166, and designed to protect against splash of liquids.

**Other Protection**
Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures**
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

**Skin protection**
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

**Environmental Exposure Controls**
Refer to the Environmental Protection Act and the Control of Pollution Act. Do not allow to enter drains or water courses.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

<table>
<thead>
<tr>
<th>Property</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Thin liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Various</td>
</tr>
<tr>
<td>Odour</td>
<td>Pungent.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Partially miscible with water.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>79 - 122°C 760 mm Hg</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.85 - 0.95 20°C</td>
</tr>
<tr>
<td>Vapour density (air=1)</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>0.6 - 1.2 kPa 21°C</td>
</tr>
</tbody>
</table>
Evaporation rate
Not determined.
(Product is a mixture)

pH-Value, Conc. Solution
Technically difficult (Non-aqueous product)

Viscosity
55 - 65 secs B4 Cup @ 20°C

Solubility Value (G/100G H2O@20°C)
Not determined.

Decomposition temperature (°C)
Not determined.

Odour Threshold, Lower
Not available.

Odour Threshold, Upper
Not available.

Flash point (°C)
0 - 21°C Sh CC (Setaflash closed cup).

Auto Ignition Temperature (°C)
270 - 360°C

Flammability Limit - Lower(%)
1.4

Flammability Limit - Upper(%)
12

Explosive properties
The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.

Oxidising properties
Does not meet the criteria for oxidising.

9.2. Other information

Volatile Organic Compound (VOC)
680 - 700 g/litre

Volatile Organic Compound (VOC)
72 - 78 g/100 g

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Stable under recommended storage and handling conditions (see section 7).
When exposed to high temperatures may produce hazardous decomposition products.

10.2. Chemical stability
Stable under recommended storage and handling conditions (see section 7).
In a fire, hazardous decomposition products may be produced.

10.3. Possibility of hazardous reactions
Risk of self-ignition of used cleaning rags, paper wipes etc. Contaminated materials should be soaked in water and placed in a closed metal container before disposal

10.4. Conditions to avoid
Avoid heat, flames and other sources of ignition. When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

Materials To Avoid
Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions

10.6. Hazardous decomposition products
such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General information
There are no data available on the mixture itself.
The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.
Formaldehyde is released during the curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitisation
Inhalation
Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Ingestion
Ingestion may cause nausea, diarrhoea and vomiting.

Skin contact
Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Eye contact
Irritating and may cause redness and pain. The liquid splashed in the eyes may cause irritation and reversible damage.

Medical Symptoms
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

Medical Considerations
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Toxicological information on ingredients.
**Acute toxicity:**

**Acute Toxicity (Oral LD50)**

7000 mg/kg Monkey

**Acute Toxicity (Dermal LD50)**

> 17100 mg/kg Rabbit

**Acute Toxicity (Inhalation LC50)**

43.68 mg/l (vapours) Rat

6 hours exposure

**Skin Corrosion/Irritation:**

No skin or eye irritation Rabbit

**Respiratory or skin sensitisation:**

**Respiratory sensitisation**

Not determined.

**Skin sensitisation**

Guinea pig maximization test (GPMT):

Not Sensitising.

**Germ cell mutagenicity:**

**Genotoxicity - In Vitro**

Ames Test

Negative.

This substance has no evidence of mutagenic properties.

**Genotoxicity - In Vivo**

Chromosome aberration:

Negative.

This substance has no evidence of mutagenic properties.

**Carcinogenicity:**

**Carcinogenicity**

Not carcinogenic

**Reproductive Toxicity:**

**Reproductive Toxicity - Fertility**

NOAEL 1.33 mg/l Rat P

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

**Reproductive Toxicity - Development**

Teratogenicity: NOAEL 1.3 mg/l Rat

**Specific target organ toxicity - single exposure:**

**STOT - Single exposure**

Oral Human

Causes damage to organs Experience with human exposure

**Specific target organ toxicity - repeated exposure:**

**STOT - Repeated exposure**

Not available.

**Aspiration hazard:**

**Viscosity**

No aspiration hazard expected. Classification criteria not met.
**Acute toxicity:**

**Acute Toxicity (Oral LD50)**
> 2000 mg/kg Rat

**Acute Toxicity (Dermal LD50)**
> 2000 mg/kg Rabbit

**Acute Toxicity (Inhalation LC50)**
> 20 mg/l (vapours) Rat 4 hours

**Skin Corrosion/Irritation:**
No skin irritation Rabbit

**Respiratory or skin sensitisation:**

**Skin sensitisation**
Local Lymph Node Assay (LLNA) Mouse
Not Sensitising.

**Germ cell mutagenicity:**

**Genotoxicity - In Vitro**
Gene Mutation:
Negative.
Based on available data the classification criteria are not met.

**Genotoxicity - In Vivo**
Chromosome aberration:
Negative.
Based on available data the classification criteria are not met.

**Carcinogenicity:**

**Carcinogenicity**
NOAEL >3000 mg/kg Oral Rat
Based on available data, classification criteria are not met

**Reproductive Toxicity:**

**Reproductive Toxicity - Fertility**
Two-generation study: NOAEL > 20.7 g/kg/day- Oral Mouse
This substance has no evidence of toxicity to reproduction.

**Reproductive Toxicity - Development**
Teratogenicity: NOAEL >=20000 ppm Inhalation. Rat

**Specific target organ toxicity - single exposure:**

**STOT - Single exposure**
Not applicable.

**Specific target organ toxicity - repeated exposure:**

**STOT - Repeated exposure**
Not available.

**Aspiration hazard:**
Based on available data the classification criteria are not met.
**Acute toxicity:**
**Acute Toxicity (Oral LD50)**
> 5840 mg/kg Rat
Based on available data the classification criteria are not met.

**Acute Toxicity (Dermal LD50)**
20.89 mg/kg
Based on available data the classification criteria are not met.

**Acute Toxicity (Inhalation LC50)**
> 10000 mg/l (vapours) Rat
6 hours exposure
Based on available data the classification criteria are not met.

**Skin Corrosion/Irritation:**
**Erythema/eschar score**
No erythema (0).

**Oedema score**
No oedema (0).
Not irritating. (rabbit)

**Serious eye damage/irritation:**
Causes serious eye damage - Category II

**Respiratory or skin sensitisation:**
**Skin sensitisation**
Buehler test: Guinea Pig
Not Sensitising.

**Germ cell mutagenicity:**
**Genotoxicity - In Vitro**
Bacterial Reverse Mutation Test
Negative.
This substance has no evidence of mutagenic properties.

**Genotoxicity - In Vivo**
Chromosome aberration - micronucleus assay
Negative.
This substance has no evidence of mutagenic properties.

**Carcinogenicity:**
**Carcinogenicity**
NOAEL 5000 ppm Inhalation. Rat
This substance has no evidence of carcinogenic properties.

**Reproductive Toxicity:**
**Reproductive Toxicity - Fertility**
Two-generation study: NOAEL 500 mg/kg Oral Rat F2a
This substance has no evidence of toxicity to reproduction.

**Reproductive Toxicity - Development**
Developmental toxicity: NOAEL 480 mg/kg Oral Rabbit
This substance has no evidence of toxicity to reproduction.
Acute toxicity:
Acute Toxicity (Oral LD50)
790 mg/kg Rat

Acute Toxicity (Dermal LD50)
> 3434 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)
> 24.24 mg/l (vapours) Rat 4 hours

Skin Corrosion/Irritation:
Irritating to skin.

Serious eye damage/irritation:
BUTANOL has severe eye irritant properties. Liquid splashes in the eye may cause serious damage.

Respiratory or skin sensitisation:
Skin sensitisation
Guinea pig maximization test (GPMT):
Not Sensitising.

Germ cell mutagenicity:
Genotoxicity - In Vitro
Chromosome aberration:
Negative.
This substance has no evidence of mutagenic properties.

Genotoxicity - In Vivo
Chromosome aberration:
Negative.
Based on available data the classification criteria are not met.

Carcinogenicity:
Carcinogenicity
Scientifically unjustified.
CASE predicted no carcinogenic potential due to the absence of biophore fragments.
This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:
Reproductive Toxicity - Fertility
Fertility: NOAEL 1454 mg/kg Inhalation. Rat
This substance has no evidence of toxicity to reproduction.

Reproductive Toxicity - Development
Teratogenicity: NOAEL 5654 mg/kg Oral Rat
This substance has no evidence of toxicity to reproduction.
Acute toxicity:
Acute Toxicity (Oral LD50)
> 2830 mg/kg Rat

Acute Toxicity (Dermal LD50)
> 2000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)
26.4 mg/l (vapours) Rat 4 hours

Skin Corrosion/Irritation:
Erythema/eschar score
Rabbit - 24 and 72 hours Very slight erythema - barely perceptible (1), fully reversible within: 8 days

Oedema score
Rabbit - 24 and 72 hours Moderate oedema - raised approximately 1 mm (3), not fully reversible within:
Irritating to skin. Category II

Serious eye damage/irritation:
Rabbit: irreversible damage

Respiratory or skin sensitisation:
Skin sensitisation
Guinea pig maximization test (GPMT):
Read across from iso-propanol
Not Sensitising.

Germ cell mutagenicity:
Negative.
Based on available data the classification criteria are not met.

Genotoxicity - In Vivo
Chromosome aberration:
Negative.
Based on available data the classification criteria are not met.

Carcinogenicity:
Carcinogenicity
The chemical structure of isobutanol contains no reported structural biophores indicating a carcinogenic potential.

Reproductive Toxicity:
Reproductive Toxicity - Fertility
Two-generation study: NOAEL > 7.5 mg/l Inhalation. Rat F2a

Reproductive Toxicity - Development
Teratogenicity: NOAEL 10 mg/l Inhalation. Rat

Toxic Dose 1 - LD 50
4016 mg/kg (oral rat)

Toxic Dose 2 - LD 50
> 2000 mg/kg (dermal rabbit)

Toxic Conc. - LC 50
> 25.8 mg/l/4h (inh-rat)
**1 PACK ETCH PRIMER CT (General colours)**

**PHENOL (CAS: 108-95-2)**

**Acute toxicity:**
**Acute Toxicity (Oral LD50)**
414 mg/kg Rat

**Acute Toxicity (Dermal LD50)**
660 mg/kg Rat

**Acute Toxicity (Inhalation LC50)**
0.3 mg/l (vapours) Rat 4 hours

**Skin Corrosion/Irritation:**
may cause skin, eye and mucous membrane burns

**Human Skin Model Test**
Cell Viability (8.6%) 1 hrs
Irritating.

**Serious eye damage/irritation:**
corrosive (rabbit eye) Irreversible within 14 days

**Respiratory or skin sensitisation:**
**Respiratory sensitisation**
Mouse

**Skin sensitisation**
Patch Test: Mouse
Not Sensitising.

**Germ cell mutagenicity:**
**Genotoxicity - In Vitro**
Chromosome aberration:
Using Chinese Hamster Ovary test with and without metabolic activation.
Phenol was mutagenic in the chromosome aberration assay in CHO cells with metabolic activation.

**Genotoxicity - In Vivo**
Chromosome aberration:
threshold dependent chromosome mutagenic activity

**Carcinogenicity:**
**Carcinogenicity**
NOAEL 370 mg/kg/day Oral Mouse
Not expected to be carcinogenic.

**Reproductive Toxicity:**
**Reproductive Toxicity - Fertility**
Two-generation study: NOAEL 70 mg/kg/day Oral Rat F2a
Based on available data the classification criteria are not met.

**Reproductive Toxicity - Development**
Developmental toxicity: NOAEL 140 mg/kg/day Oral
Also maternal toxicity.
1 PACK ETCH PRIMER CT (General colours)

FORMALDEHYDE ... % (CAS: 50-00-0)

Toxic Dose 1 - LD 50
100 mg/kg (oral rat)

Toxic Dose 2 - LD 50
270 mg/kg (dermal rabbit)

Toxic Conc. - LC 50
0.31 - 0.59 mg/l/4h (inh-rat)

**Skin Corrosion/Irritation:**
Moderately irritating.

**Serious eye damage/irritation:**
Severely irritating

**Germ cell mutagenicity:**
Weakly mutagenic
Positive.

**Carcinogenicity:**
Carcinogenicity
5 ppm Inhalation.
for 6 hours per day during the life of the animal

**Target organ for carcinogenicity**
nasopharyngeal region

**IARC Carcinogenicity**
IARC Group 1 Carcinogenic to humans.

**Specific target organ toxicity - single exposure:**
STOT - Single exposure
Inhalation.

**Target Organs**
Liver  Kidneys
Causes damage to organs

**ZINC BORATE (CAS: 51201-70-8)**

**Acute toxicity:**
Acute Toxicity (Oral LD50)
> 5000 mg/kg Rat

**Acute Toxicity (Dermal LD50)**
> 5000 mg/kg Rabbit

**Acute Toxicity (Inhalation LC50)**
4.95 mg/l (dust/mist) Rat

**SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity**
There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details. Do not allow to enter drains or water courses.

**12.1. Toxicity**
There is no toxicity data for the mixture itself.
Ecological information on ingredients.

**ETHANOL (CAS: 64-17-5)**

**Acute Toxicity - Fish**
LC50 96 hours 15300 mg/l Pimephales promelas (Fat-head Minnow)
LC50 24 hours 11200 mg/l Onchorhynchus mykiss (Rainbow trout)

**Acute Toxicity - Aquatic Invertebrates**
EC50 48 hours > 10000 mg/l Daphnia magna
EC50 24 hours 858 mg/l Artemia salina

**Acute Toxicity - Aquatic Plants**
EC50 72 hours 275 mg/l Chlorella vulgaris
EC10 72 hours 11.5 mg/l Chlorella vulgaris

**Acute Toxicity - Microorganisms**
EC50 24 hours 5800 mg/l Paramaecium caudatum
EC50 16 hours 6500 mg/l Pseudomonas putida

**Acute Toxicity - Terrestrial**
LC50 48 hours >0.1 - <1 mg/cm² Eisenia Fetida (Earthworm)

**PROPAN-2-OL (CAS: 67-63-0)**

**Acute Toxicity - Fish**
LC50 96 hours 9640 mg/l Pimephales promelas (Fat-head Minnow)

**Acute Toxicity - Aquatic Invertebrates**
EC50 48 hours 2285 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants**
EC50 1800 mg/l Scenedesmus subspicatus
7 days

**Acute Toxicity - Microorganisms**
1050 mg/l
Pseudomonas putida

**BUTANOL-norm (CAS: 71-36-3)**

**Acute Toxicity - Fish**
LC50 96 hours 1376 mg/l Pimephales promelas (Fat-head Minnow)

**Acute Toxicity - Aquatic Invertebrates**
EC50 48 hours 1328 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants**
EC50 96 hours 225 mg/l Scenedesmus subspicatus

**Chronic Toxicity - Aquatic Invertebrates**
NOEC 21 days 4.1 mg/l Daphnia magna

**2-METHYLPROPAN-1-OL (CAS: 78-83-1)**

**LC 50, 96 Hrs, Fish mg/l**
1480 - 1730 mg/l Lepomis macrochirus

**Acute Toxicity - Fish**
LC50 96 hours 1150 - 1520 mg/l Onchorhynchus mykiss (Rainbow trout)
LC50 96 hours 1370 - 1670 mg/l Pimephales promelas (Fat-head Minnow)

**Acute Toxicity - Aquatic Invertebrates**
EC50 48 hours 1100 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants**
EC50 72 hours 593 mg/l Freshwater algae
EC50 72 hours > 500 mg/l Scenedesmus subspicatus

**1-METHOXY-2-PROPANOL (CAS: 107-98-2)**

**LC 50, 96 Hrs, Fish mg/l**
>1000 mg/l Pimephales promelas (Fat-head minnow)

**Acute Toxicity - Fish**
LC50 96 hours 6812 mg/l Leuciscus idus (Golden orfe)

**EC 50, 48 Hrs, Daphnia, mg/l**
>21000 - 25900 mg/l

**IC 50, 72 Hrs, Algae, mg/l**
>1000 mg/l Scenedesmus capricornutum

**PHENOL (CAS: 108-95-2)**

**Acute Toxicity - Fish**
**1 PACK ETCH PRIMER CT (General colours)**

**Acute Toxicity - Aquatic Invertebrates**
- EC50 3.1 mg/l Freshwater invertebrates
- EC50 48 hours 10.2 -15.5 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants**
- EC50 72 hours 187 - 279 mg/l Scenedesmus subspicatus
- EC50 96 hours 46.42 mg/l Selenastrum capricornutum

**Acute Toxicity - Microorganisms**
- EC50 21 mg/l Activated sludge
  - 24 hour period

**FORMALDEHYDE ...% (CAS: 50-00-0)**

**LC 50, 96 Hrs, Fish mg/l**
- 22.6-25.7 mg/L (Pimephales promelas)

**Acute Toxicity - Fish**
- LC50 96 hours 100 - 156 mg/l Onchorhynchus mykiss (Rainbow trout)
- 96 hours 1.510 mg/l Lepomis macrochirus (Bluegill)

**EC 50, 48 Hrs, Daphnia, mg/l**
- 11.3-18 mg/L

**Acute Toxicity - Aquatic Invertebrates**
- EC50 48 hours 11.3 - 18 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants**
- EC50 72 hours 3.48 mg/l Scenedesmus subspicatus

**Acute Toxicity - Microorganisms**
- EC50 120 hours  34.1 mg/l Mixed bacterial culture in water

**ZINC BORATE (CAS: 51201-70-8)**

**Acute Toxicity - Fish**
- LC50 96 hours 0.169 mg/l Onchorhynchus mykiss (Rainbow trout)

**Acute Toxicity - Aquatic Invertebrates**
- EC50 0.6 - 1.7 mg/l Freshwater invertebrates
  - 24 hour period

**Acute Toxicity - Aquatic Plants**
- Not available.

### 12.2. Persistence and degradability

There is no data for the mixture itself.
Ecological information on ingredients.

**ETHANOL (CAS: 64-17-5)**

**Degradation**
Degradation (70%%) 5 days
Readily biodegradable

**Biological Oxygen Demand**
0.100 g O2/g substance

**Chemical Oxygen Demand**
1.9 g O2/g substance

**Degradability**
The product is easily biodegradable.

**Biodegradation**
Water Degradation (53%%) 5 days
The substance is readily biodegradable.

**Chemical Oxygen Demand**
2.23 g O2/g substance

**PROPAN-2-OL (CAS: 67-63-0)**

**Degradability**
The product is easily biodegradable.

**Biodegradation**
Water Degradation (53%%) 5 days
The substance is readily biodegradable.

**Chemical Oxygen Demand**
2.23 g O2/g substance

**BUTANOL-norm (CAS: 71-36-3)**

**Degradability**
Readily biodegradable

**Phototransformation**
Air. DT50 55.9 hours

**Stability (Hydrolysis)**
Scientifically unjustified.

**Biodegradation**
Water and Sediment Degradation (92%) 20 days
The substance is readily biodegradable. Literature data

**2-METHYLPROPAN-1-OL (CAS: 78-83-1)**

**Degradability**
The product is biodegradable.

**Biodegradation**
Water Degradation (74% in%) 28 days
Readily biodegradable

**1-METHOXY-2-PROPANOL (CAS: 107-98-2)**

**Degradability**
The product is biodegradable.

**Biodegradation**
Degradation (96%) Degradation (96%) 28 days

**PHENOL (CAS: 108-95-2)**

**Degradability**
The product has proven to be degradable under anaerobic conditions.
Water Degradation (80.1%%) 50 days

**Degradability**
Readily biodegradable

**Phototransformation**
Air. DT50 1.7 days

**Stability (Hydrolysis)**
Scientifically unjustified.

**Biodegradation**
Degradation (91%) Water Degradation (91%) 14 days

**ZINC BORATE (CAS: 51201-70-8)**

**Stability (Hydrolysis)**
Scientifically unjustified.

12.3. Bioaccumulative potential

**Bioaccumulative potential**
There is no data for the mixture itself.
Ecological information on ingredients.

**ETHANOL (CAS: 64-17-5)**

**Bioaccumulative potential**
Not expected to bioaccumulate.

**PROPAN-2-OL (CAS: 67-63-0)**

**Bioaccumulative potential**
Will not bio-accumulate.

**BUTANOL-norm (CAS: 71-36-3)**

**Bioaccumulative potential**
Will not bio-accumulate.

**Bioaccumulation factor**
BCF 3.16

**Partition coefficient**
log Kow 0.88

**2-METHYLPROPAN-1-OL (CAS: 78-83-1)**

**Bioaccumulative potential**
Scientifically unjustified.

**1-METHOXY-2-PROPAOL (CAS: 107-98-2)**

**Bioaccumulative potential**
The product does not contain any substances expected to be bioaccumulating.

**Bioaccumulation factor**
BCF < 100

**Partition coefficient**
0.37

**PHENOL (CAS: 108-95-2)**

**Bioaccumulation factor**
BCF 8.2

**Partition coefficient**
log Kow 1.46

**FORMALDEHYDE ...% (CAS: 50-00-0)**

**Bioaccumulation factor**
BCF < 1

**ZINC BORATE (CAS: 51201-70-8)**

**Bioaccumulative potential**
No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:
There is no data on the mobility of the mixture itself.
1 PACK ETCH PRIMER CT (General colours)

Ecological information on ingredients.

**ETHANOL (CAS: 64-17-5)**

**Mobility:**
Not expected to absorb on soil.

**Henry's Law Constant**
0.461 Pa m³/mol

Read across data

**PROPAN-2-OL (CAS: 67-63-0)**

**Mobility:**
The product is soluble in water.

**BUTANOL-norm (CAS: 71-36-3)**

**Mobility:**
The product is water soluble and may spread in water systems.

**Adsorption/Desorption Coefficient**

\[ K_{oc} = 2.443 \]

**Henry's Law Constant**
0.0539 Pa m³/mol

**2-METHYLPROPAN-1-OL (CAS: 78-83-1)**

**Adsorption/Desorption Coefficient**

\[ \log K_{oc} = 0.31 \]

**Henry's Law Constant**
1.012 Pa m³/mol @ 25°C

**1-METHOXY-2-PROPANOL (CAS: 107-98-2)**

**Mobility:**
The product is soluble in water. Potential for mobility in soil is very high.

**Adsorption/Desorption Coefficient**

Koc >14 <73 L/Kg 25°C

**Henry's Law Constant**
0.022 Pa m³/mol 20°C

**PHENOL (CAS: 108-95-2)**

**Adsorption/Desorption Coefficient**

Koc 1.202

**Henry's Law Constant**
0.034 Pa m³/mol @ 25°C

**FORMALDEHYDE ...% (CAS: 50-00-0)**

**ZINC BORATE (CAS: 51201-70-8)**

**Mobility:**
No data available on mobility.

**PHENOL (CAS: 108-95-2)**

**Adsorption/Desorption Coefficient**

Koc >14 <73 L/Kg 25°C

**Henry's Law Constant**
0.022 Pa m³/mol 20°C

**FORMALDEHYDE ...% (CAS: 50-00-0)**

**ZINC BORATE (CAS: 51201-70-8)**

**Mobility:**
No data available on mobility.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not allow to enter drains or water courses.

13.1. Waste treatment methods

Waste and emptied containers are controlled wastes and should be disposed of in accordance with The Environment Protection (Duty of Care) Regulations" (in England, Scotland, Wales) or The Controlled Waste (Duty of Care) Regulations (in Northern Ireland).

**Waste Class**

The European Waste Catalogue classification of this product, when disposed of as waste is:

**Waste Code:** Name of Waste (according to Directive 2000/532/EC):

08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Using information provided in this safety data sheet, advice should be obtained from the local waste authority on the classification of empty containers.
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Empty containers must be scrapped or reconditioned.
Dispose of empty containers contaminated by the product in accordance with local or national legal provisions.

SECTION 14: TRANSPORT INFORMATION

Air Transport Notes
The information provided in this section may not be valid for transport by Air. Please call the number in section 1 of this safety data sheet to obtain more information about the transport of this product by air.

14.1. UN number
UN 1263

14.2. UN proper shipping name
PAINT

14.3. Transport hazard class(es)
3

ADR Label No. 3
Transport Labels

FLAMMABLE LIQUID
3

14.4. Packing group
PG II

14.5. Environmental hazards
Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user
Transport within the user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.
EMS F-E, S-E
Tunnel Restriction Code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not relevant

SECTION 15: REGULATORY INFORMATION

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

UK Regulatory References
The provisions of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

Environmental Listing
The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839), TSO.
Hazardous Waste Regulations 2005 (SI 2005:894) and amendments

Statutory Instruments
The Control of Substances Hazardous to Health Regulations 2002(SI 2002:1689) and amendments.

Approved Code Of Practice
**1 PACK ETCH PRIMER CT (General colours)**

Dangerous Substances and Explosive Atmospheres Regulations 2002, (HSE Books L138)
Control of Substances Hazardous to Health (Fifth Edition) (HSE Books L5)

**Guidance Notes**
COSHH Essentials: easy steps to control chemicals, HSG 193. HSE books. Control Guidance Sheets, which may be relevant to the particular conditions of use, can also be found in this publication.
Chemical Warehousing: Storage of Flammable Liquids in Containers (HSG51), HSE Books.
Storage: Packaged Dangerous Substances HSG71, HSE.
A Guide to Working with Solvents (INDG 272), HSE.
Spraying of Flammable Liquids HSG178


**EU Legislation**

**National Regulations**
Workplace Exposure Limits 2005 (EH40)

**15.2. Chemical Safety Assessment**
No chemical safety assessment has been carried out.

**15.3 Paints Directive 2004/42/EC**
2004/42/EC (c)(780)740

**SECTION 16: OTHER INFORMATION**

**General information**
The product should not be used for purposes other than those shown in Section 1.

**Revision Comments**
Additional information added to Sections 8.1, 9.1, 11 and 12.
NOTE: Lines within the margin indicate significant changes from the previous revision.

This issue replaces issue 8.01.

**Issued By**
Chief Chemist

**Revision Date**
22 January 2015

**Revision**
8.02

**Supersedes date**
8 October 2013

**Risk Phrases In Full**

- **R34** Causes burns.
- **R10** Flammable.
- **R22** Harmful if swallowed.
- **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **R48/20/21/22** Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
- **R11** Highly flammable
- **R36** Irritating to eyes.
- **R37/38** Irritating to respiratory system and skin.
- **R37** Irritating to respiratory system.
- **R40** Limited evidence of a carcinogenic effect.
- **R43** May cause sensitisation by skin contact.
- **R68** Possible risk of irreversible effects.
- **R41** Risk of serious damage to eyes.
- **R23/24/25** Toxic by inhalation, in contact with skin and if swallowed.
- **R39/23/24/25** Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- **R67** Vapours may cause drowsiness and dizziness.
- **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
**Hazard Statements in Full**

- **H370** Causes damage to organs <<Organs>>.
- **H318** Causes serious eye damage.
- **H319** Causes serious eye irritation.
- **H314** Causes severe skin burns and eye damage.
- **H315** Causes skin irritation.
- **H226** Flammable liquid and vapour.
- **H302** Harmful if swallowed.
- **H412** Harmful to aquatic life with long lasting effects.
- **H225** Highly flammable liquid and vapour.
- **H290** May be corrosive to metals.
- **H317** May cause an allergic skin reaction.
- **H373** May cause damage to organs <<Organs>> through prolonged or repeated exposure.
- **H336** May cause drowsiness or dizziness.
- **H335** May cause respiratory irritation.
- **H351** Suspected of causing cancer.
- **H341** Suspected of causing genetic defects.
- **H331** Toxic if inhaled.
- **H301** Toxic if swallowed.
- **H311** Toxic in contact with skin.
- **H410** Very toxic to aquatic life with long lasting effects.
- **H400** Very toxic to aquatic life.

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**Disclaimer**

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The information of this SDS is based on the present state of our knowledge and on current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements or relevant legislation are complied with. The information in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.