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

1.1. Product identifier

377 Battery Pole Protective Lacquer 07377015AB

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

1.3. Details of the supplier of the safety data sheet

Company name: TUNAP GmbH & Co. KG
Street: Bürgermeister-Seidl-Str. 2
Place: D-82515 Wolfratshausen
Telephone: +49 (0) 8171/1600 - 0
Telefax: +49 (0) 8171/1600 - 40
E-mail: sdb@tunap.com
Internet: www.tunap.com

1.4. Emergency telephone number:

+49 (0) 30 30 686 790 (Giftnotruf Berlin)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling
methyl acetate
Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics

Signal word: Danger

Pictograms:

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.
Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P260 Do not breathe Aerosol.
P280 Wear eye/face protection.
P273 Avoid release to the environment.
P271 Use only outdoors or in a well-ventilated area.
P302+P352 IF ON SKIN: Wash with plenty of Water and soap...
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P251 Do not pierce or burn, even after use.

2.3. Other hazards
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
### Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>115-10-6</td>
<td>dimethyl ether</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>79-20-9</td>
<td>methyl acetate</td>
<td>10 - &lt; 20 %</td>
</tr>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>10 - &lt; 20 %</td>
</tr>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>3 - &lt; 5 %</td>
</tr>
<tr>
<td>64742-94-5</td>
<td>Kohlenwasserstoffe, C10, Aromaten, &lt;1 % Naphthalin</td>
<td>0.1 - &lt; 1 %</td>
</tr>
</tbody>
</table>

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**
First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

**After inhalation**
Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with skin**
Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse.
In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with eyes**
- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**
- Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

### 4.2. Most important symptoms and effects, both acute and delayed
- Headache, nausea, dizziness, fatigue, skin irritation

### 4.3. Indication of any immediate medical attention and special treatment needed
- Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media
- **Suitable extinguishing media**
- **Unsuitable extinguishing media**
  - Full water jet

#### 5.2. Special hazards arising from the substance or mixture
- Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

#### 5.3. Advice for firefighters
- In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

### Additional information
- Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures
- Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Wear personal protection equipment.

#### 6.2. Environmental precautions
- Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

#### 6.3. Methods and material for containment and cleaning up
- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

#### 6.4. Reference to other sections
- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling
- **Advice on safe handling**
  - Observe instructions for use.
  - Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point
of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When using do not eat, drink, smoke, sniff.

Wear personal protection equipment (refer to section 8).

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Protect from frost. Protect against direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
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</thead>
<tbody>
<tr>
<td>106-97-8</td>
<td>Butane</td>
<td>600</td>
<td>1450</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>750</td>
<td>1810</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>115-10-6</td>
<td>Dimethyl ether</td>
<td>400</td>
<td>766</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>958</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>79-20-9</td>
<td>Methyl acetate</td>
<td>200</td>
<td>616</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250</td>
<td>770</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

Additional advice on limit values

a no restriction
b End of exposure or end of shift
c at long term exposure: after several previous shifts
d before next shift

blood (B)
Urine (U)

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.
DIN EN 166
Hand protection
Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min
Thickness of the glove material 0,45 mm
DIN EN 374

Skin protection
Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
When exceeding the relevant workplace exposure limits, note the following:
Suitable respiratory protective equipment: Combination filter device (DIN EN 141).
Filtering device with filter or ventilator filtering device of type: AX
Observe the wear time limits as specified by the manufacturer.
Observe legal regulations and provisions.

Environmental exposure controls
Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Aerosol</th>
</tr>
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<tbody>
<tr>
<td>Colour:</td>
<td>dark blue</td>
</tr>
<tr>
<td>Odour:</td>
<td>solvent like</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Property</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value (at 20 °C):</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>-40 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>-80 °C</td>
</tr>
<tr>
<td>Flammability</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limits:</td>
<td>1,5</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>32</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td></td>
</tr>
<tr>
<td>Not oxidising</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>not determined</td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
<td>0,84 g/cm³</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>The study does not need to be conducted because the substance is known to be insoluble in water.</td>
</tr>
</tbody>
</table>
Solubility in other solvents
not determined

Partition coefficient: not determined

Viscosity / kinematic: < 7 mm²/s

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

SECTION 10: Stability and reactivity

10.1. Reactivity
Ignition hazard.

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5. Incompatible materials
Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products
Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information
Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution
There are no data available on the mixture itself.

Acute toxicity
Based on available data, the classification criteria are not met.
<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-20-9</td>
<td>methyl acetate</td>
<td>oral</td>
<td>LD50</td>
<td>Rat</td>
<td>Gestis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td>6970</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>Rabbit</td>
<td>Gestis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/kg</td>
<td>5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h)</td>
<td>LC50</td>
<td>49 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>inhalation vapour</td>
<td>LC50</td>
<td>1237 mg/l</td>
<td>Mouse.</td>
<td></td>
</tr>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h)</td>
<td>LC50</td>
<td>&gt; 23,3</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</td>
<td>oral</td>
<td>LD50</td>
<td>5500</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>2770</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h)</td>
<td>LC50</td>
<td>23,3 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha (petroleum), aromatic, light</td>
<td>oral</td>
<td>LD50</td>
<td>3592</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 3160</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>inhalation (4 h)</td>
<td>LC50</td>
<td>658 ppm</td>
<td>Rat</td>
<td>GESTIS</td>
</tr>
<tr>
<td>64742-94-5</td>
<td>Kohlenwasserstoffe, C10, Aromaten, &lt;1 % Naphthalin</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h)</td>
<td>LC50</td>
<td>&gt; 5 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

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

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

**Carcinogenic/mutagenic/toxic effects for reproduction**
- Based on available data, the classification criteria are not met.
- No indication of human carcinogenicity.
- No indications of human germ cell mutagenicity exist.
- No indications of human reproductive toxicity exist.

**STOT-single exposure**
- May cause drowsiness or dizziness. (methyl acetate)
Based on available data, the classification criteria are not met.

**Aspiration hazard**
- Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal**
- No information available.

### SECTION 12: Ecological information

#### 12.1. Toxicity
- The product is not: Ecotoxic.
### Aquatic toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>115-10-6</td>
<td>dimethyl ether</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       &gt; 4100</td>
<td>96</td>
<td></td>
<td>Poecilia reticulata (Guppy)</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       &gt; 154</td>
<td>96</td>
<td></td>
<td>Green Algae</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      &gt; 4400</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79-20-9</td>
<td>methyl acetate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       &gt; 250 - 350 mg/l</td>
<td>96</td>
<td></td>
<td>Brachydanio rerio (zebra-fish)</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       &gt; 120</td>
<td>72</td>
<td></td>
<td>Scenedesmus subspicatus</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      1026</td>
<td>48</td>
<td></td>
<td>Daphnia magna (Big water flea)</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       91,42</td>
<td>96</td>
<td></td>
<td>Fish, no other information</td>
<td>United States Environmental Protection A</td>
<td>The Ecosar class program has been developed</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       19,37</td>
<td>96</td>
<td></td>
<td>Algae</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
<td>Calculation using ECOSAR Program v1.00.</td>
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<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      69,43</td>
<td>48</td>
<td></td>
<td>Daphnia sp.</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
<td>Calculation using ECOSAR Program v1.00.</td>
</tr>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       &gt; 1-10</td>
<td>96</td>
<td></td>
<td>Pimephales promelas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       &gt; 10 - 100 mg/l</td>
<td>72</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
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<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      &gt; 1-10</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       &gt; 1 - 10</td>
<td>96</td>
<td></td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       &gt; 10 - 100 mg/l</td>
<td>72</td>
<td></td>
<td>Algae toxicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      &gt; 1 - 10</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha (petroleum), aromatic, light</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       9,2 mg/l</td>
<td>96</td>
<td></td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       2,6-2,9</td>
<td>96</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
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</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l      3,2 mg/l</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
<td>TUNAP GmbH &amp; Co. KG</td>
<td></td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l       49,9</td>
<td>96</td>
<td></td>
<td>Fish, no other information</td>
<td>United States Environmental Protection A</td>
<td>The Ecosar class program has been developed</td>
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<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l       19,37</td>
<td>96</td>
<td></td>
<td>Algae</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
<td>Calculation using ECOSAR Program v1.00.</td>
</tr>
</tbody>
</table>
### 12.2. Persistence and degradability

The product has not been tested.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Method</th>
<th>Value</th>
<th>d</th>
<th>Source</th>
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<tbody>
<tr>
<td></td>
<td>Evaluation</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### 12.2.1. Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>3.4 - 5.2</td>
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</tbody>
</table>

12.3. Bioaccumulative potential

The product has not been tested.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
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</thead>
<tbody>
<tr>
<td>115-10-6</td>
<td>dimethyl ether</td>
<td>0.1</td>
</tr>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>1.09</td>
</tr>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>3.4 - 5.2</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>1.09</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>1.09</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

**Further information**

Avoid release to the environment.

### SECTION 13: Disposal considerations

13.1. Waste treatment methods
Advice on disposal
Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products
160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Waste disposal number of used product
160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging
150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging
Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1
Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1
Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2, see SP63
Marine pollutant: no
Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: See SP277
Safety Data Sheet

according to Regulation (EC) No 1907/2006

377 Battery Pole Protective Lacquer 07377015AB

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Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1950
**14.2. UN proper shipping name:** AEROSOLS, flammable

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -
Hazard label: 2.1
Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**
Warning: Flammable gases.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**
not applicable

SECTION 15: Regulatory information

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

**EU regulatory information**
Restrictions on use (REACH, annex XVII):
- Entry 28: isobutane; Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane; Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics; Solvent naphtha (petroleum), aromatic, light; butane

2010/75/EU (VOC): No information available.
2004/42/EC (VOC): No information available.

**Additional information**
- Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
- Aerosol directive (75/324/EEC)

**National regulatory information**
Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information

**Abbreviations and acronyms**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service
- LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H220  Extremely flammable gas.
H222  Extremely flammable aerosol.
H225  Highly flammable liquid and vapour.
H226  Flammable liquid and vapour.
H229  Pressurised container: May burst if heated.
H280  Contains gas under pressure; may explode if heated.
H304  May be fatal if swallowed and enters airways.
H315  Causes skin irritation.
H319  Causes serious eye irritation.
H335  May cause respiratory irritation.
H336  May cause drowsiness or dizziness.
H411  Toxic to aquatic life with long lasting effects.
H412  Harmful to aquatic life with long lasting effects.
EUH066  Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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