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

1.1. Product identifier

102 Active oil MP10200400AB

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

Use of the substance/mixture

Lubricant

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
Fax: +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 2

Hazard Statements:

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

- Hydrocarbons, C6, iso-alkanes, < 5 % n-hexane
- 2-Propanol
- Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, <2% aromatics

Signal word: Danger

Pictograms:

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements

H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

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 spray.
P280 Wear protective gloves.
P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P251 Do not pierce or burn, even after use.

Special labelling of certain mixtures
EUH208 Contains 4-Nonylphenoxyacetic acid. May produce an allergic reaction.

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>75-28-5</td>
<td>isobutane</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5 % n-hexane</td>
<td>10 - &lt; 20 %</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>3 - &lt; 5 %</td>
</tr>
<tr>
<td>1174921-73-3</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, &lt;2% aromatics</td>
<td>3 - &lt; 5 %</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>1 - &lt; 3 %</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-hexane</td>
<td>0.1 - &lt; 1 %</td>
</tr>
<tr>
<td>61791-55-7</td>
<td>N-Tallowalkyl-1,3-propanediamine</td>
<td>0.1 - &lt; 1 %</td>
</tr>
<tr>
<td>3115-49-9</td>
<td>4-Nonylphenoxycetic acid</td>
<td>0.1 - &lt; 1 %</td>
</tr>
</tbody>
</table>

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

### 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
Danger of bursting container.

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</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>TWA (8 h)</td>
<td>WEL</td>
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<tr>
<td>67-63-0</td>
<td>Propan-2-ol</td>
<td>750</td>
<td>1810</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>400</td>
<td>999</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500</td>
<td>1250</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>72</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
</tbody>
</table>
DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5% n-hexane</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
</tr>
<tr>
<td>1174921-73-3</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, &lt;2% aromatics</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</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
Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

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
When exceeding the relevant workplace exposure limits, note the following:
9.1. Information on basic physical and chemical properties

**Physical state:** Aerosol  
**Colour:** yellow-brown  
**Odour:** solvent like  

**Test method**  
DIN 19268

**Changes in the physical state**

- **pH-Value (at 20 °C):** not determined

**Flammability**

- **Solid:** not applicable  
- **Gas:** not applicable  
- **Lower explosion limits:** 1 vol. %  
- **Upper explosion limits:** 15 vol. %  
- **Ignition temperature:** 250 °C

**Auto-ignition temperature**

- **Solid:** not applicable  
- **Gas:** not applicable

**Decomposition temperature:** not determined

**Oxidizing properties**

- Not oxidising.

- **Vapour pressure:** not determined

- **Density (at 20 °C):** 0.76 g/cm³  
  DIN 51757

- **Water solubility:** The study does not need to be conducted because the substance is known to be insoluble in water.

**Solubility in other solvents**

- not determined

- **Partition coefficient:** not determined

- **Vapour density:** not determined

- **Evaporation rate:** not determined

9.2. Other information
SECTION 10: Stability and reactivity

10.1. Reactivity
   Extremely flammable aerosol.

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.
### Safety Data Sheet

According to Regulation (EC) No 1907/2006

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>inhalation vapour</td>
<td>LC50</td>
<td>1237 mg/l</td>
<td>Mouse.</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5 % n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5840 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2920 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>oral</td>
<td>LD50</td>
<td>5280 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td>1174921-73-3</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, &lt;2% aromatics</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 15000</td>
<td>Rat Study report (1977)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 5000 mg/kg</td>
<td>Rabbit Study report (1993)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>47.5 mg/l</td>
<td>Rat Study report (1997)</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>inhalation (4 h) gas</td>
<td>LC50</td>
<td>658 ppm</td>
<td>Rat GESTIS</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>&gt; 31.86 mg/l</td>
<td>Rat</td>
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<tr>
<td>61791-55-7</td>
<td>N-Tallowalkyl-1,3-propanediamine</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;300 - 2000</td>
<td>Rat</td>
</tr>
<tr>
<td>3115-49-9</td>
<td>4-Nonylphenoxyacetic acid</td>
<td>oral</td>
<td>LD50</td>
<td>1674 mg/kg</td>
<td>Rat</td>
</tr>
</tbody>
</table>

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

**Sensitising effects**
- Contains 4-Nonylphenoxyacetic acid. May produce an allergic reaction.

**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. (Hydrocarbons, C6, iso-alkanes, < 5 % n-hexane)

**STOT-repeated exposure**
- Based on available data, the classification criteria are not met.
Safety Data Sheet

according to Regulation (EC) No 1907/2006

102 Active oil MP10200400AB
Product code: 1103569
Print date: 28.06.2019

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

Specific effects in experiment on an animal
No information available.

Additional information on tests
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
### 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>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>91,42 mg/l</td>
<td>96 h</td>
<td>Fish, no other information</td>
<td>United States Environmental Protection A</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>19,37 mg/l</td>
<td>96 h</td>
<td>Algae</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>69,43 mg/l</td>
<td>48 h</td>
<td>Daphnia sp.</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
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<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5 % n-hexane</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>&gt;10 -100 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>CONCAWE, Brussels, Belgium (2009)</td>
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<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>13,56 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>CONCAWE, Brussels, Belgium (2009)</td>
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<td>EC50</td>
<td>31,9 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
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<td>Fish toxicity</td>
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<td>Crustacea toxicity</td>
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<td>74-98-6</td>
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<td>Acute fish toxicity</td>
<td>LC50</td>
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<td>96 h</td>
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<td>19,37 mg/l</td>
<td>96 h</td>
<td>Algae</td>
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<td>EC50</td>
<td>69,43 mg/l</td>
<td>48 h</td>
<td>Daphnia sp.</td>
<td>USEPA OPPT Risk Assessment Division (200)</td>
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<td>67-63-0</td>
<td>2-Propanol</td>
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<td></td>
<td>Acute fish toxicity</td>
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<td>9640 mg/l</td>
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<td>48 h</td>
<td>Daphnia magna</td>
<td></td>
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<tr>
<td>1174921-73-3</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, &lt;2% aromatics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>&gt;1000 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
<td>CONCAWE, Brussels, Belgium (2010)</td>
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<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>&gt;1000 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
<td>CONCAWE, Brussels, Belgium (2010)</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>&gt;1000 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td>CONCAWE, Brussels, Belgium (2010)</td>
</tr>
<tr>
<td></td>
<td>Fish toxicity</td>
<td>NOEC</td>
<td>0,182 mg/l</td>
<td>28 d</td>
<td>Oncorhynchus mykiss</td>
<td>Company report (2010)</td>
</tr>
<tr>
<td></td>
<td>Crustacea toxicity</td>
<td>NOEC</td>
<td>0,317 mg/l</td>
<td>21 d</td>
<td>Daphnia magna</td>
<td>Company report (2010)</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>49,9 mg/l</td>
<td>96 h</td>
<td>Fish, no other information</td>
<td>United States Environmental Protection A</td>
</tr>
</tbody>
</table>

Revision No: 1,03 - Replaces version: 1,02
GB - EN
Revision date: 25.04.2019
### 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>
</tr>
</thead>
<tbody>
<tr>
<td>3115-49-9</td>
<td>4-Nonylphenoxyacetic acid</td>
<td>OECD 301B; ISO 9439; 92/69/EWG, C,4-C</td>
<td>42 - 46 %</td>
<td>28</td>
<td>Moderately/partially biodegradable.</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

The product has not been tested.

**Partition coefficient n-octanol/water**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>1,09</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5 % n-hexane</td>
<td>3,6</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>1,09</td>
</tr>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>0,05</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>1,09</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-hexane</td>
<td>3,9</td>
</tr>
</tbody>
</table>

**BCF**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>BCF</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C6, iso-alkanes, &lt; 5 % n-hexane</td>
<td>501,187</td>
<td>Pimephales promelas</td>
<td>QSAR in Environmenta</td>
</tr>
<tr>
<td>1174921-73-3</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, &lt;2% aromatics</td>
<td>144,3</td>
<td>calculated</td>
<td>Other company data (</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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

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: -
   Hazards 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: -
   Hazards 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 (Hydrocarbons, C6, iso-alkanes, < 5 % n-hexane)
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
102 Active oil MP10200400AB

Hazard label: 2.1
Marine pollutant: yes
Special Provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantity: 1000 mL
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: yes
Danger releasing substance: Hydrocarbons, C6, iso-alkanes, < 5 % n-hexane

14.6. Special precautions for user
No information available.

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, iso-alkanes, < 5 % n-hexane; Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, <2% aromatics; 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
Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D): 2 - dearly water contaminating

SECTION 16: Other information

Changes
This data sheet contains changes from the previous version in section(s): 14,16.
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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
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 (division of the American Chemical Society)
DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC) Short Term Exposure Limit
LC50: Lethal Concentration
EC50: half maximal Effective Concentration
ErC50: means EC50 in terms of reduction of growth rate

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.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
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.
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.
EUH208 Contains 4-Nonylphenoxycetic acid. May produce an allergic reaction.

Further Information
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]:
Calculation method.
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.)