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

1.1. Product identifier
606 NFZ Trailer Spezial-Fett N16060500AB

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture
No information available.

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
Email: 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
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.
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
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.
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
Safety Data Sheet

according to Regulation (EC) No 1907/2006

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smoking.

P211 Do not spray on an open flame or other ignition source.
P260 Do not breathe Aerosol.
P280 Wear Eye/face protection.
P271 Use only outdoors or in a well-ventilated area.
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P273 Avoid release to the environment.
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 @00000002149. 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>EC No</th>
<th>Index No</th>
<th>REACH No</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>200-857-2</td>
<td>601-004-00-0</td>
<td>01-2119485395-27</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>921-024-6</td>
<td>01-2119475514-35</td>
<td>10 - &lt; 20 %</td>
<td></td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</td>
<td>927-510-4</td>
<td>01-2119475515-33</td>
<td>10 - &lt; 20 %</td>
<td></td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>200-827-9</td>
<td>601-003-00-5</td>
<td>01-2119486944-21</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>203-448-7</td>
<td>601-004-00-0</td>
<td>01-2119474691-32</td>
<td>1 - &lt; 3 %</td>
</tr>
</tbody>
</table>

Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts

0.1 - < 1 %

Skin Sens. 1B; H317

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

SECTION 4: First aid measures

4.1. Description of first aid measures
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

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>
</tr>
</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>
<td></td>
</tr>
<tr>
<td>750</td>
<td></td>
<td>1810</td>
<td>STEL (15 min)</td>
<td>WEL</td>
<td></td>
<td></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>Benzencesulfonic acids, di-C10-14-alkyl derivatives, calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>35,26 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>25 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Worker DNEL, acute</td>
<td>dermal</td>
<td>local</td>
<td>1,04 mg/cm²</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
<td>8,7 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
<td>12,5 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, acute</td>
<td>dermal</td>
<td>local</td>
<td>0,518 mg/cm²</td>
</tr>
<tr>
<td></td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
<td>2,5 mg/kg bw/day</td>
</tr>
</tbody>
</table>
PNEC values

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts</td>
<td></td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,1 mg/l</td>
</tr>
<tr>
<td>Freshwater (intermittent releases)</td>
<td>1 mg/l</td>
</tr>
<tr>
<td>Marine water</td>
<td>0,1 mg/l</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>45211 mg/kg</td>
</tr>
<tr>
<td>Marine sediment</td>
<td>45211 mg/kg</td>
</tr>
<tr>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>1000 mg/l</td>
</tr>
<tr>
<td>Soil</td>
<td>36739,74 mg/kg</td>
</tr>
</tbody>
</table>

Additional advice on limit values

a no restriction  
b End of exposure or shift  
c in long-term exposure: after several shifts  
d prior to next shift

TWA (EC): time-weighted average
U: Urea  
B: Blood

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) 480 min
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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
</tr>
<tr>
<td>Colour</td>
<td>brown</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<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></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>0,6 vol. %</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>9,4 vol. %</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</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>0,787 g/cm³ DIN 51757</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>
<tr>
<td>Solubility in other solvents</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>not determined</td>
</tr>
<tr>
<td>Viscosity / kinematic</td>
<td>&gt; 20,5 mm²/s</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content</td>
<td>not determined</td>
</tr>
</tbody>
</table>

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

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable.

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
No information available.

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>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 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>&gt; 23,3 mg/l</td>
<td>Rat</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 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation (4 h) vapour</td>
<td>LC50</td>
<td>23,3 mg/l</td>
<td>Rat</td>
<td></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</td>
<td>GESTIS</td>
</tr>
</tbody>
</table>

Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts

<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></td>
<td></td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 10000 - &lt; 20000 mg/kg</td>
<td>Rat</td>
<td>Study report (1972)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
<td>Study report (1989)</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.
Sensitising effects
Contains @00000002149. 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-C7, n-alkanes, isoalkanes cyclic, < 5% n-hexane; Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics)

STOT-repeated exposure
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.

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 Dose [h] [d] Species Source Method

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>91.42</td>
<td>96 h</td>
<td>Fish, no other information</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>19.37</td>
<td>96 h</td>
<td>Algae</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>69.43</td>
<td>48 h</td>
<td>Daphnia sp.</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>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>&gt; 1-10</td>
<td>96 h</td>
<td>Pimephales promelas</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>&gt; 10 - 100 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>&gt; 1-10</td>
<td>48 h</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>&gt;1 - 10</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>&gt;10 - 100 mg/l</td>
<td>72 h</td>
<td>Algae toxicity</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>&gt;1 - 10</td>
<td>48 h</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>49.9</td>
<td>96 h</td>
<td>Fish, no other information</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>19.37</td>
<td>96 h</td>
<td>Algae</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>69.43</td>
<td>48 h</td>
<td>Daphnia sp.</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>49.9</td>
<td>96 h</td>
<td>Fish, no other information</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>19.37</td>
<td>96 h</td>
<td>Algae</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>69.43</td>
<td>48 h</td>
<td>Daphnia sp.</td>
</tr>
</tbody>
</table>

### Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute fish toxicity</td>
<td>LC50 mg/l</td>
<td>&gt; 100</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
</tr>
<tr>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 mg/l</td>
<td>&gt;1000</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 mg/l</td>
<td>&gt;1000</td>
<td>48 h</td>
<td>Daphnia magna</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>
</tr>
</thead>
<tbody>
<tr>
<td>92128-66-0</td>
<td>Hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclic, &lt; 5% n-hexane</td>
<td>OECD Guideline 301 F</td>
<td>98%</td>
<td>28</td>
<td>Easily biodegradable (concerning to the criteria of the OECD)</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>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>

**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>160504</td>
<td>Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts</td>
<td>70,8</td>
<td>Fish, not further specified.</td>
<td>Study report (2013)</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. Do not allow to enter into soil/subsoil. 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

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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): 2.1
14.4. Packing group: -

Hazard label: 2.1+8
Marine pollutant: No
Special Provisions: 63, 190, 277, 327, 344, 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
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; 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): 1 - slightly water contaminating

Additional information
94/69/EC (21st ATP). The benzene content of the product is less than 0.1%. It applies the annotation P. Classification and labeling as carcinogenic is not necessary.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes
This data sheet contains changes from the previous version in section(s): 1.

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%
Relevant H and EUH statements (number and full text)

- **H220**: Extremely flammable gas.
- **H222**: Extremely flammable aerosol.
- **H225**: Highly 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.
- **H317**: May cause an allergic skin reaction.
- **H336**: May cause drowsiness or dizziness.
- **H411**: Toxic to aquatic life with long lasting effects.
- **H412**: Harmful to aquatic life with long lasting effects.
- **EUH208**: Contains @000000002149. May produce an allergic reaction.

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.)*