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

1.1. Product identifier
901 Liqid Grease Flow MP90100400AB

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
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.

2.2. Label elements
Regulation (EC) No. 1272/2008
Signal word: Danger

Pictograms:

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

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.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures
EUH208 Contains Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts. May produce an allergic reaction.

2.3. Other hazards
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.
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>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>50 - &lt;= 100 %</td>
<td></td>
<td></td>
<td></td>
<td>Flam. Gas 1, Liquefied gas; H220 H280</td>
</tr>
<tr>
<td>68037-01-4</td>
<td>Dec-1-ene, homopolymer, hydrogenated</td>
<td>10 - &lt; 20 %</td>
<td></td>
<td></td>
<td></td>
<td>Asp. Tox. 1; H304</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>5 - &lt; 10 %</td>
<td></td>
<td></td>
<td></td>
<td>Flam. Gas 1, Liquefied gas; H220 H280</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>1 - &lt; 3 %</td>
<td></td>
<td></td>
<td></td>
<td>Flam. Gas 1, Liquefied gas; H220 H280</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>0.1 - &lt; 1 %</td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1B; H317</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>0.1 - &lt; 1 %</td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1B; H317</td>
</tr>
<tr>
<td>68584-23-6</td>
<td>Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts</td>
<td>0.1 - &lt; 1 %</td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1B; H317</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 trouble 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
High power 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).
Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking.

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
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></td>
<td>TWA (8 h) WEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>750</td>
<td>1810</td>
<td></td>
<td>STEL (15 min)</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>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>local</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>local</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Worker DNEL, long-term</td>
<td>dermal</td>
<td>local</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>inhalation</td>
<td>systemic</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>systemic</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>dermal</td>
<td>local</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Consumer DNEL, long-term</td>
<td>oral</td>
<td>systemic</td>
</tr>
</tbody>
</table>
PNEC values

<table>
<thead>
<tr>
<th>Substance</th>
<th>Environmental compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Freshwater</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td>226000000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>226000000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Secondary poisoning</td>
<td>16,667 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>1000 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>271000000 mg/kg</td>
</tr>
<tr>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Freshwater</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td>226000000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>226000000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Secondary poisoning</td>
<td>16,667 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>1000 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>271000000 mg/kg</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
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
Physical state: Aerosol
Colour: beige
Odour: mild

Test method
pH-Value (at 20 °C):
DIN 19268

Changes in the physical state
Melting point: not determined
Initial boiling point and boiling range: -42 °C
Flash point: -80 °C ISO 3679

Flammability
Solid: not applicable
Gas: not applicable

Lower explosion limits: 1,5
Upper explosion limits: 9,4

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): 0,855 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
Viscosity / dynamic: DIN 53019-1
Viscosity / kinematic:
(at 40 °C) > 20,5 mm²/s DIN EN ISO 3104
9.2. Other information

Solid content: not determined

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

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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.
### Chemical names and Doses

<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>68037-01-4</td>
<td>Dec-1-ene, homopolymer, hydrogenated</td>
<td>Oral</td>
<td>LD50</td>
<td>&gt; 5000 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) aerosol</td>
<td>LC50</td>
<td>&gt; 5.2 mg/l</td>
<td>Rat</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>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>Oral</td>
<td>LD50 mg/kg</td>
<td>&gt; 16000</td>
<td>Rat Study report (1981)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
<td>Rabbit Study report (1981)</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>Oral</td>
<td>LD50 mg/kg</td>
<td>&gt; 16000</td>
<td>Rat Study report (1981)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 4000 mg/kg</td>
<td>Rabbit Study report (1986)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation (4 h) aerosol</td>
<td>LC50</td>
<td>&gt; 5 mg/l</td>
<td>Rat</td>
</tr>
<tr>
<td>68584-23-6</td>
<td>Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts</td>
<td>Oral</td>
<td>LD50 mg/kg</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>LD50 mg/kg</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation (4 h) aerosol</td>
<td>LC50</td>
<td>&gt;5 mg/l</td>
<td>Rat</td>
</tr>
</tbody>
</table>

### Irritation and corrosivity
Based on available data, the classification criteria are not met.

### Sensitising effects
Contains Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts. 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
Based on available data, the classification criteria are not met.

### 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

The product is not Ecotoxic.
## Aquatic Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Acute fish toxicity</th>
<th>Acute algae toxicity</th>
<th>Acute crustacea toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>isobutane</td>
<td>LC50 91.42 mg/l</td>
<td>ErC50 19.37 mg/l</td>
<td>EC50 69.43 mg/l</td>
</tr>
<tr>
<td>68037-01-4</td>
<td>Dec-1-ene, homopolymer, hydrogenated</td>
<td>LC50 &gt; 1000 mg/l</td>
<td>ErC50 &gt; 1000 mg/l</td>
<td>EC50 &gt; 1000 mg/l</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>LC50 49.9 mg/l</td>
<td>ErC50 19.37 mg/l</td>
<td>EC50 69.43 mg/l</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>LC50 49.9 mg/l</td>
<td>ErC50 19.37 mg/l</td>
<td>EC50 69.43 mg/l</td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>ErC50 &gt; 1000 mg/l</td>
<td>EC50 &gt; 1000 mg/l</td>
<td>(&gt; 10000 mg/l)</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>LC50 &gt;10000 mg/l</td>
<td>ErC50 &gt; 1000 mg/l</td>
<td>EC50 &gt; 1000 mg/l</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

The product has not been tested.

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>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>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>&gt; 4.46</td>
</tr>
<tr>
<td>70024-69-0</td>
<td>Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts</td>
<td>18.05</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.

**Contaminated packaging**
Water (with cleaning agent). 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
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; 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)

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

Skin resorption/Sensitization:
- Causes allergic hypersensitivity reactions.

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): 2,4,5,10,11.

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.
- 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.
- H317: May cause an allergic skin reaction.
- EUH208: Contains Sulfonic acids, petroleum, calcium salts, Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts. 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.)