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

1.1. Product identifier
BIKELINE Multifunctional Oil 125ml 1101809

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 Deutschland Vertriebs GmbH & Co. Betriebs 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
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.
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, C9-C10, n-alkanes, isoalkanes, cyclenes, <2% aromatics
Hydrocarbons, C10 - C13, n-alkanes, iso-alkanes, cyclics, < 2 % aromates
Signal word: Danger
Pictograms:

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
BIKELINE Multifunctional Oil 125ml 1101809

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+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352 IF ON SKIN: Wash with plenty of Water and soap...
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.
P501 Dispose of contents/container to Dispose of contents/container according to the official regulations.

Special labelling of certain mixtures
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH208 Contains @00000002149. May produce an allergic reaction.

2.3. Other hazards
No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Chemical name</th>
<th>CAS No</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclohexanes, &lt;2% aromatics</td>
<td>64742-48-9</td>
<td>927-241-2</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>isobutane</td>
<td>75-28-5</td>
<td>200-857-2</td>
<td>25 - &lt; 50 %</td>
</tr>
<tr>
<td>propane</td>
<td>74-98-6</td>
<td>200-827-9</td>
<td>3 - &lt; 5 %</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>203-448-7</td>
<td>1 - &lt; 3 %</td>
</tr>
<tr>
<td>Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts</td>
<td>939-603-7</td>
<td>0.1 - &lt; 1 %</td>
<td></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.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
- Water fog, Foam, Carbon dioxide (CO2). Extinguishing powder.

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
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.

Advice on storage compatibility

- 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></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>
</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. Do not breathe gas/fumes/vapour/spray.

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
Wear eye protection/face protection.

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
Flame-retardant protective clothing. Wear anti-static footwear and clothing

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: A
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>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>brown</td>
</tr>
<tr>
<td>Odour:</td>
<td>sweetish</td>
</tr>
</tbody>
</table>

pH-Value (at 20 °C): not determined DIN 19268

Changes in the physical state
Melting point: not determined
Initial boiling point and boiling range: -11,7 °C
Flash point: > 23 °C

Flammability
Solid: not applicable
Gas: not applicable
Lower explosion limits: 0,5 vol. %
Upper explosion limits: 9,4 vol. %

Auto-ignition temperature
Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties
Not oxidising.

Vapour pressure: not determined
Vapour pressure: No information available.
Density (at 20 °C): 0,7828 g/cm³ DIN 51757
BIKELINE Multifunctional Oil 125ml 1101809

Print date: 11.12.2017
Product code: 1101809

Bulk density: not applicable
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: No information available.
Viscosity / kinematic: < 7 mm²/s
Flow time: not applicable
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
Flammable, Ignition hazard.

10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

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.

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

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. (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, <2% aromatics)

STOT-repeated exposure
Repeated exposure may cause skin dryness or cracking.

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 Directive 1999/45/EC.

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>Aquatic toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9</td>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, &lt;2% aromatics</td>
<td>Acute fish toxicity</td>
<td>LC50 &gt;1000 mg/l</td>
<td>96</td>
<td></td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>EC50 &gt;1000 mg/l</td>
<td>72</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 &gt;1000 mg/l</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Acute fish toxicity</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Benzenesulfonic acids, di-C10-14-alkyl derivatives, calcium salts</td>
<td>Acute fish toxicity</td>
<td>LC50 &gt;100 mg/l</td>
<td>96</td>
<td></td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50 &gt;100 mg/l</td>
<td>72</td>
<td></td>
<td>Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50 &gt;100 mg/l</td>
<td>48</td>
<td></td>
<td>Daphnia magna (Big water flea)</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>2.8</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>2.36</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>2.89</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)

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

#### Inland waterways transport (ADN)

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

#### Marine transport (IMDG)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>UN 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>AEROSOLS</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>2</td>
</tr>
<tr>
<td>14.4. Packing group:</td>
<td>-</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>2, see SP63</td>
</tr>
<tr>
<td>Marine pollutant:</td>
<td>no</td>
</tr>
<tr>
<td>Special Provisions:</td>
<td>63, 190, 277, 327, 344, 381,959</td>
</tr>
<tr>
<td>Limited quantity:</td>
<td>See SP277</td>
</tr>
<tr>
<td>Excepted quantity:</td>
<td>E0</td>
</tr>
<tr>
<td>EmS:</td>
<td>F-D, S-U</td>
</tr>
</tbody>
</table>

#### Air transport (ICAO-TI/IATA-DGR)

<table>
<thead>
<tr>
<th>14.1. UN number:</th>
<th>UN 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name:</td>
<td>AEROSOLS, flammable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es):</td>
<td>2.1</td>
</tr>
<tr>
<td>14.4. Packing group:</td>
<td>-</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>2.1</td>
</tr>
</tbody>
</table>
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: Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclenes, <2% aromatics; isobutane; butane
2010/75/EU (VOC): No information available.
2004/42/EC (VOC): No information available.

Additional information

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

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

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.
H226 Flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
BIKELINE Multifunctional Oil 125ml 1101809

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.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.
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.)