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

1.1. Product identifier
BIKELINE Kettenöl 125ml

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 Telefax: +49 (0) 8171/1600 - 40
e-mail: sdb@tunap.com
Internet: www.tunap.com

1.4. Emergency telephone number:
+49 (0) 30 30 686 790 (Giftnotruf Berlin)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No. 1272/2008
Hazard categories:
Aerosol: Aerosol 1
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
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 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.
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 according to the official regulations.
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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC No</td>
</tr>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>50 - &lt; 100 %</td>
</tr>
<tr>
<td>203-448-7</td>
<td>601-004-00-0 01-2119474691-32</td>
<td></td>
</tr>
<tr>
<td>68037-01-4</td>
<td>Dec-1-ene, homopolymer, hydrogenated</td>
<td>20 - &lt; 25 %</td>
</tr>
<tr>
<td>500-183-1</td>
<td>01-2119486452-34</td>
<td></td>
</tr>
<tr>
<td>61789-86-4</td>
<td>Sulfonic acids, petroleum, calcium salts</td>
<td>0.1 - &lt; 1 %</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>
</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

Revision No: 1,04 - Replaces version: 1,03  GB - EN  Revision date: 11.12.2017
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.

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.

6.2. Environmental precautions

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.

6.3. Methods and material for containment and cleaning up

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>TWA (8 h)</th>
<th>STEL (15 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-97-8</td>
<td>Butane</td>
<td>600 ppm</td>
<td>1450 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>750 ppm</td>
<td>1810 mg/m³</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
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>yellow-brown</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
<td></td>
</tr>
<tr>
<td>pH-Value (at 20 °C):</td>
<td>not determined</td>
<td>DIN 19268</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>-15 °C</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>1,4 vol. %</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>9,4 vol. %</td>
<td></td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not oxidising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
<td>0,853 g/cm³</td>
<td>DIN 51757</td>
</tr>
<tr>
<td>Bulk density</td>
<td>not applicable</td>
<td></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>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Viscosity / dynamic</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Viscosity / kinematic</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Flow time</td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
<td></td>
</tr>
</tbody>
</table>
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
No information available.

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
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.

### SECTION 12: Ecological information

#### 12.1. Toxicity
The product is not: Ecotoxic.
BIKELINE Kettenöl 125ml

### 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>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

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

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

**Waste disposal number of used product**

160504  WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste
Waste disposal number of contaminated packaging
150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging
Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group:

<table>
<thead>
<tr>
<th>Hazard label</th>
<th>Classification code</th>
<th>Special Provisions</th>
<th>Limited quantity</th>
<th>Excepted quantity</th>
<th>Transport category</th>
<th>Tunnel restriction code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>5F</td>
<td>190 327 344 625</td>
<td>1 L</td>
<td>E0</td>
<td>2</td>
<td>D</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Hazard label</th>
<th>Classification code</th>
<th>Special Provisions</th>
<th>Limited quantity</th>
<th>Excepted quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>5F</td>
<td>190 327 344 625</td>
<td>1 L</td>
<td>E0</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Hazard label</th>
<th>Marine pollutant</th>
<th>Special Provisions</th>
<th>Limited quantity</th>
<th>Excepted quantity</th>
<th>EmS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, see SP63</td>
<td>no</td>
<td>63, 190, 277, 327, 344, 381,959</td>
<td>See SP277</td>
<td>E0</td>
<td>F-D, S-U</td>
</tr>
</tbody>
</table>

Air transport (ICAO-TIIATA-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:

<table>
<thead>
<tr>
<th>Hazard label</th>
<th>Special Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>A145 A167 A802</td>
</tr>
</tbody>
</table>
BIKELINE Kettenöl 125ml

Print date: 11.12.2017
Product code: 1101131
Page 10 of 11

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

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): 2,4,5,7,8,10,15.

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%
### BIKELINE Kettenöl 125ml

| Print date: 11.12.2017 | Product code: 1101131 | Page 11 of 11 |

#### 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.

#### 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.)*