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

1.1 Product identifier

Tyre Foam 500 ml
Art.: 365877

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

Relevant identified uses of the substance or mixture:
Cleaner

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Berner Produkten b.v., Vogelzankweg 175, 6374 AC Landgraaf, Netherlands
Phone:+31 45 53 39 133, Fax:+31 45 53 14 588
info@berner.nl, www.berner.nl

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

Qualified person's e-mail address: Productsafety.Chemicals@berner-group.com Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:
---

Telephone number of the company in case of emergencies:
+49 (0) 221 80260 889 (09:00 – 17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) 1272/2008 (CLP)
Hazard class | Hazard category | Hazard statement
--- | --- | ---
Aquatic | 3 | H412-Harmful to aquatic life with long lasting effects.
Chronic | | 
Aerosol | 1 | H222-Extremely flammable aerosol.
Aerosol | 1 | H229-Pressurised container: May burst if heated.

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

H412-Harmful to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

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. P251-Do not pierce or burn, even after use.
P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

EUH208-Contains (R)-p-mentha-1,8-diene. May produce an allergic reaction.

Without adequate ventilation, formation of explosive mixtures may be possible.

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

Aerosol
3.1 Substance
n.a.
3.2 Mixture

<table>
<thead>
<tr>
<th>Ammonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration number (REACH)</td>
</tr>
<tr>
<td>Index</td>
</tr>
</tbody>
</table>
### Tyre Foam 500 ml

**Art.:** 365877

**EINECS, ELINCS, NLP**
215-647-6

**CAS**
1336-21-6

**content %**
0,1-<1

**Classification according to Regulation (EC) 1272/2008 (CLP)**

- Skin Corr. 1B, H314
- Aquatic Acute 1, H400 (M=1)
- Aquatic Chronic 2, H411
- Eye Dam. 1, H318

---

### (R)-p-mentha-1,8-diene

**Registration number (REACH)**
01-2119529223-47-XXXX

**Index**
601-029-00-7

**EINECS, ELINCS, NLP**
227-813-5

**CAS**
5989-27-5

**content %**
0,1-<1

**Classification according to Regulation (EC) 1272/2008 (CLP)**

- Flam. Liq. 3, H226
- Asp. Tox. 1, H304
- Skin Irrit. 2, H315
- Skin Sens. 1, H317
- Aquatic Acute 1, H400 (M=1)
- Aquatic Chronic 1, H410 (M=1)

---

### Bronopol (INN)

**Registration number (REACH)**
---

**Index**
603-085-00-8

**EINECS, ELINCS, NLP**
200-143-0

**CAS**
52-51-7

**content %**
0,01-<0,1

**Classification according to Regulation (EC) 1272/2008 (CLP)**

- Acute Tox. 4, H302
- Acute Tox. 4, H312
- Skin Irrit. 2, H315
- Eye Dam. 1, H318
- STOT SE 3, H335
- Aquatic Acute 1, H400 (M=10)
- Aquatic Chronic 2, H411

---

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

---

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

**Inhalation**

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

**Skin contact**

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

**Eye contact**
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

**Ingestion**
Typically no exposure pathway.
Rinse the mouth thoroughly with water.
Give copious water to drink - consult doctor immediately.

### 4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

### 4.3 Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media
**Suitable extinguishing media**
Water jet spray / alcohol resistant foam / CO2 / dry extinguisher

**Unsuitable extinguishing media**
High volume water jet

### 5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
- Oxides of carbon
- Toxic gases
- Danger of bursting (explosion) when heated
- Explosive vapour/air or gas/air mixtures.

### 5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

### 6.2 Environmental precautions
Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.
Prevent surface and ground-water infiltration, as well as ground penetration. If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up
If spray or gas escapes, ensure ample fresh air is available. Without adequate ventilation, formation of explosive mixtures may be possible.
Active substance:
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling
7.1.1 General recommendations
Ensure good ventilation.
Avoid contact with eyes or skin.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Do not use on hot surfaces.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities
Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Observe special regulations for aerosols!
Observe special storage conditions.
Do not store with flammable or self-igniting materials.
Keep protected from direct sunlight and temperatures over 50°C.
Store in a well-ventilated place.
Store cool.

7.3 Specific end use(s)
No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ammonia</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%:0,1-&lt;1</td>
<td></td>
</tr>
</tbody>
</table>
8.2 Exposure controls

| Chemical Name | Butane
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-TWA: NH3 25 ppm (18 mg/m3) (WEL), 20 ppm (14 mg/m3) (EU)</td>
</tr>
<tr>
<td>Monitoring procedures: ---</td>
</tr>
<tr>
<td>BMGV: ---</td>
</tr>
</tbody>
</table>

---

**Chemical Name** | Content %:
--- | ---
WEL-TWA: 600 ppm (1450 mg/m3) | ---
WEL-STEL: 750 ppm (1810 mg/m3) | ---
Monitoring procedures: --- | Compur - KITA-221 SA (549 459)
BMGV: --- | Other information: ---

---


### 8.2 Exposure controls

**Ammonia**

**Area of application** | **Exposure route / Environmental compartment** | **Effect on health** | **Descrip tor** | **Value** | **Unit** | **Note**
--- | --- | --- | --- | --- | --- | ---
Environment - freshwater | | Long term, local effects | DNEL | 2,8 | mg/m3 | ---
Environment - marine | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Environment - periodic release | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---

---

**Ammonia**

**Area of application** | **Exposure route / Environmental compartment** | **Effect on health** | **Descrip tor** | **Value** | **Unit** | **Note**
--- | --- | --- | --- | --- | --- | ---
Environment - freshwater | | Long term, local effects | DNEL | 2,8 | mg/m3 | ---
Environment - marine | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Environment - periodic release | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---

---


---

**Ammonia**

**Area of application** | **Exposure route / Environmental compartment** | **Effect on health** | **Descrip tor** | **Value** | **Unit** | **Note**
--- | --- | --- | --- | --- | --- | ---
Environment - freshwater | | Long term, local effects | DNEL | 2,8 | mg/m3 | ---
Environment - marine | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Environment - periodic release | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---

---


---

**Ammonia**

**Area of application** | **Exposure route / Environmental compartment** | **Effect on health** | **Descrip tor** | **Value** | **Unit** | **Note**
--- | --- | --- | --- | --- | --- | ---
Environment - freshwater | | Long term, local effects | DNEL | 2,8 | mg/m3 | ---
Environment - marine | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Environment - periodic release | | Long term, local effects | DNEL | 68 | mg/kg body weight/d ay | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---
Consumer | Human - inhalation | Long term, systemic effects | DNEL | 23,8 | mg/m3 | ---

---

<table>
<thead>
<tr>
<th>Area of application</th>
<th>Environmental compartment</th>
<th>Effect on health</th>
<th>Descriptor</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment - freshwater</td>
<td>PNEC</td>
<td>0,01</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - marine</td>
<td>PNEC</td>
<td>0,000 8</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - sporadic (intermittent) release</td>
<td>PNEC</td>
<td>0,002 5</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - sewage treatment plant</td>
<td>PNEC</td>
<td>0,43</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - sediment, freshwater</td>
<td>PNEC</td>
<td>0,041</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - sediment, marine</td>
<td>PNEC</td>
<td>0,003 28</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment - soil</td>
<td>PNEC</td>
<td>0,5</td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bronopol (INN)</th>
<th>Exposure route / Environmental compartment</th>
<th>Effect on health</th>
<th>Descriptor</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Human - dermal Long term, systemic effects</td>
<td>DNEL</td>
<td>1,4</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Human - oral Long term, systemic effects</td>
<td>DNEL</td>
<td>0,35</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Human - dermal Short term, systemic effects</td>
<td>DNEL</td>
<td>4,2</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Human - oral Short term, systemic effects</td>
<td>DNEL</td>
<td>1,1</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.2.2 Individual protection measures, such as personal protective equipment

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. BS EN 14042.
BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN 374).
If applicable
Protective gloves in butyl rubber (EN 374).
Protective Neoprene® / polychloroprene gloves (EN 374).
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:
0,5
Permeation time (penetration time) in minutes:
480
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
Usual protective working garments

Respiratory protection:
Normally not necessary.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

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>Foam aerosol</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Lemon</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Lower explosive limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper explosive limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour density (air = 1)</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
9.2 Other information

Miscibility: Not determined
Fat solubility / solvent: Not determined
Conductivity: Not determined
Surface tension: Not determined
Solvents content: Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
Heating, open flame, ignition sources
Pressure increase will result in danger of bursting.

10.5 Incompatible materials
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Possibly more information on health effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Tyre Foam 500 ml</th>
<th>Art.: 365877</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity / effect</td>
<td>Endpoint</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td></td>
</tr>
<tr>
<td>Toxicity / effect</td>
<td>Endpoint</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LD50</td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LDLo</td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LDLo</td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LCLo</td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation:</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td></td>
</tr>
</tbody>
</table>
### Safety Data Sheet

**Tyre Foam 500 ml**

**Art.**: 365877

**Symptoms**: asthmatic symptoms, respiratory distress, unconsciousness, burning of the membranes of the nose and throat, vomiting, cornea opacity, coughing, cramps, circulatory collapse, shock, nausea

<table>
<thead>
<tr>
<th>(R)-p-mentha-1,8-diene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity / effect</strong></td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
</tr>
</tbody>
</table>

**Symptoms**: diarrhoea, rash, itching, gastrointestinal disturbances, mucous membrane irritation, nausea and vomiting.

<table>
<thead>
<tr>
<th>Bronopol (INN)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity / effect</strong></td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
</tr>
</tbody>
</table>
Acute toxicity, by inhalation: LC50 >0.588 mg/l/4 h Rat Aerosoldata of an aerosol
Respiratory or skin sensitisation: Guinea pig OECD 406 (Skin Sensitisation) Not sensitizing
Carcinogenicity: Negative

<table>
<thead>
<tr>
<th>Butane</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity / effect</td>
<td>Acute toxicity, by inhalation:</td>
<td>LC50</td>
<td>658</td>
<td>mg/l/4 h</td>
<td>Rat</td>
<td>OECD 471 (Bacterial Reverse Mutation Test)</td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Aspiration hazard:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Symptoms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ataxia, breathing difficulties, drowsiness, unconsciousness, frostbite, disturbed heart rhythm, headaches, cramps, intoxication, dizziness, nausea and vomiting.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Tyre Foam 500 ml</th>
<th>Art.: 365877</th>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
</table>
12.2. Persistence and degradability:
The surfactant(s) contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5. Results of PBT and vPvB assessment</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>12.6. Other adverse effects:</td>
<td>n.d.a.</td>
</tr>
</tbody>
</table>
### Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

**Revision date / version:** 24.04.2018 / 0002  
**Replacing version dated / version:** 05.02.2018 / 0001  
**Valid from:** 24.04.2018  
**Tyre Foam 500 ml**  
**Art.:** 365877

### Other information:

<table>
<thead>
<tr>
<th>DOC-elimination degree(complexing organic substance)</th>
<th>80%/28d: n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other information:</td>
<td>AOX 0 %</td>
</tr>
</tbody>
</table>

**Other information:** Does not contain any organically bound halogens which can contribute to the AOX value in waste water.

### Ammonia

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>NOEC/NOEL</td>
<td>21d</td>
<td>0,42</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>NOEC/NOEL</td>
<td>27d</td>
<td>0,06</td>
<td>mg/l</td>
<td>Ictalurus punctatus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>8,2</td>
<td>mg/l</td>
<td>Pimephales promelas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>0,53</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td></td>
<td>Anhydrous substance</td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>EC50</td>
<td>48h</td>
<td>0,66</td>
<td>mg/l</td>
<td>Daphnia pulex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>EC50</td>
<td>48h</td>
<td>1,16</td>
<td>mg/l</td>
<td>Daphnia pulicaria</td>
<td></td>
<td>Anhydrous substance</td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Readily biodegradable</td>
</tr>
<tr>
<td>12.3. Bioaccumulative potential:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not to be expected</td>
</tr>
<tr>
<td>Toxicity to bacteria:</td>
<td>EC50</td>
<td>5min</td>
<td>1,16</td>
<td>mg/l</td>
<td>Photobacterium phosphoreum</td>
<td></td>
<td>Anhydrous substance</td>
</tr>
</tbody>
</table>

**Water solubility:** Soluble

### (R)-p-mentha-1,8-diene

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>0,70</td>
<td>mg/l</td>
<td>Pimephales promelas</td>
<td>OECD 203</td>
<td>(Fish, Acute Toxicity Test)</td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>EC50</td>
<td>48h</td>
<td>0,42</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>---------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>NOEC/NOEL</td>
<td>96h</td>
<td>4</td>
<td>mg/l</td>
<td>OECD 301 D (Ready Biodegradability - Closed Bottle Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>28d</td>
<td>92</td>
<td>%</td>
<td>OECD 301 B</td>
<td>(Ready Biodegradability - Co2 Evolution Test)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bronopol (INN)**

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>41,2</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 210 (Fish, Early-Life Stage Toxicity Test)</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LC50</td>
<td>49d</td>
<td>39,1</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 211 (Daphnia magna Reproduction Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>NOEC/NOEL</td>
<td>21d</td>
<td>0,27</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 301 B</td>
<td>(Ready Biodegradability - Co2 Evolution Test)</td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>EC50</td>
<td>72h</td>
<td>0,4 - 2,8</td>
<td>mg/l</td>
<td>Pseudokirchneriella subcapitata</td>
<td>OECD 302 B</td>
<td>(Inherent Biodegradability - Zahn-Wellens/EMPA Test)</td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>&gt;70</td>
<td>%</td>
<td>activated sludge</td>
<td>OECD 301 B</td>
<td>(Biodegradability - Co2 Evolution Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>DOC</td>
<td>50</td>
<td>%</td>
<td>OECD 302 B</td>
<td>(Inherent Biodegradability - OECD Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.3. Bioaccumulative potential:</td>
<td>Log Kow</td>
<td>0,22</td>
<td>OECD 107</td>
<td>(Partition Coefficient (n-octanol/water)) - Shake Flask Method)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Toxicity to bacteria: | LC0  | 3h  | 43  | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) |
---|---|---|---|---|---|---|
Other organisms: | LC50 | 14d | >500 | mg/l | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) |
Other information: | COD | 600 | mg/g |
Other information: | Koc | 5 |

**Butane**

**Toxicity / effect** | **Endpoint** | **Time** | **Value** | **Unit** | **Organism** | **Test method** | **Notes**
---|---|---|---|---|---|---|---
12.1. Toxicity to fish: | LC50 | 96h | 24,11 | mg/l | | QSAR |
12.1. Toxicity to daphnia: | LC50 | 48h | 14,22 | mg/l | | QSAR |
12.3. Bioaccumulative potential: | Log Pow | | 2,98 | | | |
12.5. Results of PBT and vPvB assessment | | | | | | No PBT substance, No vPvB substance |

**SECTION 13: Disposal considerations**

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
16 05 04 gases in pressure containers (including halons) containing hazardous substances
20 01 29 detergents containing hazardous substances
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
Take full aerosol cans to problem waste collection.
Take emptied aerosol cans to valuable material collection.
For contaminated packing material
Pay attention to local and national official regulations.
Recommendation:
Do not perforate, cut up or weld uncleaned container.
Recycling
15 01 04 metallic packaging

SECTION 14: Transport information

General statements
14.1. UN number: 1950

Transport by road/by rail (ADR/RID)
14.2. UN proper shipping name: UN 1950 AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
14.5. Environmental hazards: Not applicable
LQ: 1 L
Tunnel restriction code: D

Transport by sea (IMDG-code)
14.2. UN proper shipping name: AEROSOLS (ISOHEXANES)
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
EmS: F-D, S-U
Marine Pollutant: n.a
14.5. Environmental hazards: Not applicable

Transport by air (IATA)
14.2. UN proper shipping name: Aerosols, flammable
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
14.5. Environmental hazards: Not applicable

14.6. Special precautions for user
Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Observe restrictions:
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th>Notes to Annex I</th>
<th>Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements</th>
<th>Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3a</td>
<td>11.1</td>
<td>150 (netto)</td>
<td>500 (netto)</td>
</tr>
</tbody>
</table>

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC):
REGULATION (EC) No 648/2004
11 %
5 % or over but less than 15 %
aliphatic hydrocarbons
less than 5 %
non-ionic surfactants

perfumes
CITRAL
LIMONENE
2-BROMO-2-NITROPROPANE-1,3-DIOL
OCTYLISOTHIAZOLINONE

Observe incident regulations.

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 15
Employee training in handling dangerous goods is required.
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):
<table>
<thead>
<tr>
<th>Compound</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 3, H412</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Aerosol 1, H222</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Aerosol 1, H229</td>
<td>Classification based on the form or physical state.</td>
</tr>
</tbody>
</table>

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

Aquatic Chronic — Hazardous to the aquatic environment - chronic
Skin Corr. — Skin corrosion
Aquatic Acute — Hazardous to the aquatic environment - acute
Eye Dam. — Serious eye damage
Flam. Liq. — Flammable liquid
Asp. Tox. — Aspiration hazard
Skin Irrit. — Skin irritation
Skin Sens. — Skin sensitization
Acute Tox. — Acute toxicity - oral
Acute Tox. — Acute toxicity - dermal
STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
<table>
<thead>
<tr>
<th>Any abbreviations and acronyms used in this document:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Article Categories</td>
</tr>
<tr>
<td>acc., acc. to</td>
<td>according, according to</td>
</tr>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>AOEL</td>
<td>Acceptable Operator Exposure Level</td>
</tr>
<tr>
<td>AOX</td>
<td>Adsorbable organic halogen compounds</td>
</tr>
<tr>
<td>approx.</td>
<td>approximately</td>
</tr>
<tr>
<td>Art., Art. no. Article number</td>
<td></td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)</td>
</tr>
<tr>
<td>BAM</td>
<td>Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)</td>
</tr>
<tr>
<td>BAwA</td>
<td>Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>BGV</td>
<td>Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)</td>
</tr>
<tr>
<td>BHT</td>
<td>Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)</td>
</tr>
<tr>
<td>BMGV</td>
<td>Biological monitoring guidance value (EH40, UK)</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical oxygen demand</td>
</tr>
<tr>
<td>BSEF</td>
<td>Bromine Science and Environmental Forum</td>
</tr>
<tr>
<td>bw</td>
<td>body weight</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>CEC</td>
<td>Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids</td>
</tr>
<tr>
<td>CESIO</td>
<td>Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques</td>
</tr>
<tr>
<td>CIPAC</td>
<td>Collaborative International Pesticides Analytical Council</td>
</tr>
</tbody>
</table>
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 24.04.2018 / 0002
Replacing version dated / version: 05.02.2018 / 0001
Valid from: 24.04.2018
PDF print date: 05.07.2018
Tyre Foam 500 ml
Art.: 365877

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
COD Chemical oxygen demand
CTFA Cosmetic, Toiletary, and Fragrance Association
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
DT50 Dwell Time - 50% reduction of start concentration
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEA European Economic Area
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ERC Environmental Release Categories
ES Exposure scenario
etc. et cetera
EU European Union
EWC European Waste Catalogue
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
HET-CAM Hen’s Egg Test - Chorionallantoic Membrane
HGWPHalocarbon Global Warming Potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Container
IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAELLowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.