Power Foam NSF 500ml

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

1.1. Product identifier

Trade name/designation:

Power Foam NSF 500ml

Article No.:
T100101

UFI:
86TP-7K7V-RQ0J-THYY

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

Use of the substance/mixture:
Glass cleaner

* 1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS02
Flame

Signal word: Danger

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

Supplemental hazard information: none

Precautionary statements Prevention	
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Precautionary statements Storage	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards
No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Description:
Active ingredient mixture with propellant gas

Additional information:
Aerosols and containers fitted with a solid nebuliser containing substances or mixtures classified as hazardous by aspiration must not be labelled for this hazard.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
	Aliphatic hydrocarbons The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	≥ 5 – < 15 %
CAS No.: 106-97-8 EC No.: 203-448-7 Index No.: 601-004-00-0 REACH No.: 01-2119474691-32	**butane** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) ≥ 5,000 mg/kg ATE (dermal) ≥ 5,000 mg/kg ATE (inhalation, gases) 658 ppmV ATE (inhalation, vapour) ≥ 50 mg/L	2.5 – < 10 %
CAS No.: 111-76-2 EC No.: 203-905-0 Index No.: 603-014-00-0 REACH No.: 01-2119475108-36-XXXX	**2-butoxyethanol** Acute Tox. 3 (H331), Acute Tox. 4 (H312, H302), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315) Danger **Acute Toxicity Estimate** ATE (oral) 1,200 mg/kg ATE (dermal) 2,000 mg/kg ATE (inhalation, vapour) 3 mg/L	2.5 – < 10 %
CAS No.: 74-98-6 EC No.: 200-827-9 Index No.: 601-003-00-5 REACH No.: 01-2119486944-21	**propane** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) 5,840 mg/kg ATE (dermal) 13,900 mg/kg ATE (inhalation, gases) > 25 ppmV ATE (inhalation, vapour) ≥ 50 mg/L	2.5 – < 10 %
	Fragrances The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	< 5 %

Power Foam NSF 500ml

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH No.: 01-2119457558-25	**propan-2-ol** Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) > 25 ppmV ATE (inhalation, vapour) > 20 mg/L	1 – < 2.5 %
CAS No.: 75-28-5 EC No.: 200-857-2 REACH No.: 01-2119485395-27	**Isobutane** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)  Danger **Acute Toxicity Estimate** ATE (inhalation, vapour) 1,237 mg/L	0.1 – < 1 %
CAS No.: 1336-21-6 EC No.: 215-647-6 Index No.: 007-001-01-2 REACH No.: 01-2119488876-14	**Ammonia, aqueous solution** Acute Tox. 4 (H302), Aquatic Acute 1 (H400), STOT SE 3 (H335), Skin Corr. 1B (H314)  Danger **Specific concentration limit (SCL)** STOT SE 3; H335: C ≥ 5% **Acute Toxicity Estimate** ATE (oral) 350 mg/kg ATE (dermal) ≥ 5,000 mg/kg ATE (inhalation, vapour) ≥ 50 mg/L	≥ 0.25 – < 1 %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Following inhalation:
Fresh air supply, consult a doctor in case of complaints.

In case of skin contact:
In general, the product is not irritating to skin.

After eye contact:
Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

Following ingestion:
Do not induce vomiting, seek medical help immediately.

4.2. Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water mist, Extinguishing powder, Carbon dioxide, alcohol resistant foam

Unsuitable extinguishing media:
Water in full jet

5.2. Special hazards arising from the substance or mixture
No further relevant information available.

5.3. Advice for firefighters
Special protective equipment: Put on breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Wear protective equipment. Keep unprotected persons away.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Do not wash away with water or aqueous detergents.

Other information:

Provide adequate ventilation.

6.4. Reference to other sections

Further information on proper storage: see section 7. For further information on personal protective equipment: see section 8. For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Ensure good ventilation/extraction at the workplace.

Fire prevent measures:

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Container is under pressure. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Do not open by force or burn even after use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store in a cool place. The official regulations for the storage of pressurised gas packages must be observed.

Hints on storage assembly:

The official regulations for the storage of pressurised gas packages must be observed.

Storage class (TRGS 510, Germany): 2B – Aerosol dispensers and lighters

Further information on storage conditions:

Store in a cool dry place. Protect from heat and direct sunlight.

7.3. Specific end use(s)

Recommendation:

No further relevant information available.

SECTION 8: Exposure controls/personal protection

*

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	① 800 ppm (1,900 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	② 40 ppm (200 mg/m³) ⑤ (max. 4x30 min./Schicht, kann über die Haut aufgenommen werden) H
IOELV (EU)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m³) ② 50 ppm (246 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT)	**2-butoxyethanol** CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	② 2,000 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m³)
MAK (AT)	**propan-2-ol** CAS No.: 67-63-0 EC No.: 200-661-7	② 800 ppm (2,000 mg/m³) ⑤ (max. 4x15 min./Schicht)
MAK (AT)	**propan-2-ol** CAS No.: 67-63-0 EC No.: 200-661-7	① 200 ppm (500 mg/m³)
MAK (AT)	**Isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./SchichtMomentanwert)
MAK (AT)	**Isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	① 800 ppm (1,900 mg/m³)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	98 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	59 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	1,091 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	426 mg/m³	① DNEL Consumer ② Acute - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	147 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	10.3 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	26.7 mg/kg bw/day	① DNEL Consumer ② Acute – dermal, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	6.3 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	500 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	89 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	888 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	319 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	26 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	8.8 mg/L	① PNEC aquatic, marine water
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	463 mg/L	① PNEC sewage treatment plant
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	0.88 mg/L	① PNEC sediment, freshwater
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	3.46 mg/L	① PNEC sediment, marine water
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	8.14 mg/kg	① PNEC soil
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, freshwater
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, marine water
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	2,251 mg/L	① PNEC sewage treatment plant
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	552 mg/kg	① PNEC sediment, freshwater

Substance name	PNEC Value	① PNEC type
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	552 mg/kg	① PNEC sediment, marine water
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	28 mg/kg	① PNEC soil
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7	140.9 mg/L	① PNEC aquatic, intermittent release

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No further details.. See section 7.

8.2.2. Personal protection equipment



Eye/face protection:

Safety goggles (EN-166)

Skin protection:

Hand protection
Wear gloves for protection against chemicals according to EN 374.
Gloves / solvent resistant
Breakthrough times and swelling properties of the material must be taken into consideration.
Glove material:
The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.
Nitrilkautschuk Recommended material thickness: ≥ 0,5 mm
Permeation time (maximum wear duration):
For continuous contact we recommend gloves with a breakthrough time of at least 240 minutes, with the preference for a breakthrough time greater than 480 minutes. For short term or splash protection we recommend the same. We are aware that suitable gloves offering this protection are not available. In this case, a shorter breakthrough time is permissible, provided the procedures for maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance the gloves give against a chemical substance, as this depends on the exact composition of the material of the gloves. The exact breakthrough time should be checked with the glove manufacturer and adhered to.
Body protection:
Use protective suit. (EN-13034/6)
Antistatic, chemical and oil resistant clothing and safety shoes are recommended. (EN1149; EN340&EN ISO 13688 EN13034-6).

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Filter ABEK-P2

Other protection measures:

Wash hands before breaks and after work. General ventilation.

8.2.3. Environmental exposure controls

Use a suitable container to prevent environmental pollution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form: Aerosol
Colour: colourless
Odour: fruity
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	11.3	20 °C	
Initial boiling point and boiling range	-44.5 °C		
Flash point	-97 °C		
Evaporation rate	*No data available*		
Auto-ignition temperature	365 °C		
Upper/lower flammability or explosive limits	1.1 – 12 Vol-%		
Vapour pressure	4,000 hPa	20 °C	
Density	0.938 g/cm³	20 °C	
Water solubility	*No data available*		

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosives:
Not applicable

Flammable gases:
Not applicable

Aerosols:
Not applicable

Oxidizing gases:
Not applicable

Gases under pressure:
Not applicable

Flammable liquids:
Not applicable

Flammable solids:
Not applicable

Self-reactive substances and mixtures:
Not applicable

Pyrophoric liquids:
Not applicable

Pyrophoric solids:
Not applicable

Self-heating substances and mixtures:
Not applicable

Substances or mixtures which, in contact with water, emit flammable gases:
Not applicable

Oxidizing liquids:
Not applicable

Oxidizing solids:
Not applicable

Organic peroxides:
Not applicable

Corrosive to metals:
Not applicable

Desensitised explosives:
Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability
Thermal decomposition / Conditions to avoid: No decomposition when used as directed.

10.3. Possibility of hazardous reactions
No dangerous reactions known.

10.4. Conditions to avoid
No further relevant information available.

10.5. Incompatible materials
No further relevant information available.

10.6. Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

* **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

butane CAS No.: 106-97-8 EC No.: 203-448-7
LD_{50} oral: ≥5,000 mg/kg (Rat)
LD_{50} dermal: ≥5,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): 658 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
ATE (oral)[1]: 1,200 mg/kg
ATE (inhalation, vapour)[1]: 3 mg/L
LD_{50} oral: 300 mg/kg (Kaninchen)
LD_{50} dermal: 2,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): 2.2 mg/L (Rat)
propane CAS No.: 74-98-6 EC No.: 200-827-9
LD_{50} oral: 5,840 mg/kg (Rat)
LD_{50} dermal: 13,900 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): >25 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
LD_{50} oral: >2,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rat)
LC_{50} Acute inhalation toxicity (gas): >25 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): >20 mg/L 6 h (Rat)
Isobutane CAS No.: 75-28-5 EC No.: 200-857-2
LC_{50} Acute inhalation toxicity (vapour): 1,237 mg/L (Mouse)
Ammonia, aqueous solution CAS No.: 1336-21-6 EC No.: 215-647-6
LD_{50} oral: 350 mg/kg (Rat)
LD_{50} dermal: ≥5,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)

[1]: Acute Toxicity Estimate. Harmonised (legal) classification.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

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.

11.2. Information on other hazards

Endocrine disrupting properties:
None of the ingredients are included.

SECTION 12: Ecological information

*

12.1. Toxicity

butane CAS No.: 106-97-8 EC No.: 203-448-7
LC_{50}: 49.9 mg/L 4 d (fish)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia sp.) Calculation with the ECOSAR programme v1.00.
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant, Algae) Calculation using ECOSAR Program v1.00
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
LC_{50}: 1,490 mg/L (fish, Lepomis macrochirus)
LC_{50}: 1,464 mg/L 4 d (fish, Oncorhynchus mykiss)
EC_{50}: 911 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
EC_{50}: 1,800 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: 88 mg/L (Algae/water plant, Pseudokirchneriella subcapitata)
propane CAS No.: 74-98-6 EC No.: 200-827-9
LC_{50}: 9,640 mg/L 4 d (fish, Pimephales promelas)
LC_{50}: 0.41 mg/L 4 d (fish, Oncorhynchus mykiss)
LC_{50}: 49.9 mg/L 4 d (fish)
EC_{50}: >100 mg/L (Algae/water plant, Bacteria)
EC_{50}: 0.17 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia) Calculation with the ECOSAR programme v1.00.
NOEC: 0.017 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant, Algae) Calculation with the ECOSAR programme v1.00.
LOEC: 1,000 mg/L (Algae/water plant, Algae)
LOEC: 1,000 mg/L (Algae/water plant, Alge)
IC_{50}: 11.3 mg/L 3 d (Algae/water plant)
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
LC_{50}: >1,000 mg/L 4 d (fish)
LC_{50}: 9,640 mg/L 4 d (fish, Pimephales promelas)
LC_{50}: 9,714 mg/L 1 d (Daphnia magna)
EC_{50}: >1,000 mg/L 2 d (crustaceans)
EC_{50}: >100 mg/L (Algae/water plant, Bacteria)
EC_{50}: >100 mg/L 2 d (crustaceans, Daphnia magna)
ErC_{50}: >100 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)
ErC_{50}: >100 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)
LOEC: 1,000 mg/L (Alge)
LOEC: 1,000 mg/L (Algae/water plant, Algae)
LOEC: 1,000 mg/L

Isobutane CAS No.: 75-28-5 EC No.: 200-857-2
LC_{50}: 91.42 mg/L 4 d (fish)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia sp.)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant)
Ammonia, aqueous solution CAS No.: 1336-21-6 EC No.: 215-647-6
LC_{50}: 0.89 mg/L (fish)
EC_{50}: 110 mg/L (crustaceans, Daphnia)

12.2. Persistence and degradability

butane CAS No.: 106-97-8 EC No.: 203-448-7
Biodegradation: Yes, rapidly
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
Biodegradation: Yes, rapidly
Remark: 1000 - 10000 mg/L
propane CAS No.: 74-98-6 EC No.: 200-827-9
Biodegradation: Yes, rapidly
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Biodegradation: Yes, rapidly
Remark: Readily biodegradable (according to OECD criteria).

Biodegradation:
Not readily biodegradable.

12.3. Bioaccumulative potential

butane CAS No.: 106-97-8 EC No.: 203-448-7
Log K_{OW}: 1.09
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
Log K_{OW}: 0.81
propane CAS No.: 74-98-6 EC No.: 200-827-9
Log K_{OW}: 1.09
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Log K_{OW}: 0.05
Isobutane CAS No.: 75-28-5 EC No.: 200-857-2
Log K_{OW}: 1.09

12.4. Mobility in soil
No further relevant information available.

12.5. Results of PBT and vPvB assessment

butane CAS No.: 106-97-8 EC No.: 203-448-7
Results of PBT and vPvB assessment: —
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
Results of PBT and vPvB assessment: —
propane CAS No.: 74-98-6 EC No.: 200-827-9
Results of PBT and vPvB assessment: —
propan-2-ol CAS No.: 67-63-0 EC No.: 200-661-7
Results of PBT and vPvB assessment: —
Isobutane CAS No.: 75-28-5 EC No.: 200-857-2
Results of PBT and vPvB assessment: —
Ammonia, aqueous solution CAS No.: 1336-21-6 EC No.: 215-647-6
Results of PBT and vPvB assessment: —
Aliphatic hydrocarbons
Results of PBT and vPvB assessment: —

Fragrances
Results of PBT and vPvB assessment: —

12.6. Endocrine disrupting properties
The product does not contain any substances with endocrine-disrupting properties.

12.7. Other adverse effects
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. into the sewerage system. Flushing away larger quantities into sewers or water bodies can lead to an increase in pH value. A high pH-value damages water organisms. In the dilution of the application concentration, the value is reduced considerably, so that after use of the product the waste water entering the sewage system is only slightly hazardous to water. are only slightly hazardous to water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Must not be disposed of together with household waste. Do not allow to enter into surface water or drains.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV
Directive 2008/98/EC (Waste Framework Directive)

HP 3	Flammable

Waste treatment options
Other disposal recommendations:
Uncleaned packaging: Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable
14.3. Transport hazard class(es)			
 2.1	No data available	 2.1	 2.1
14.4. Packing group			
		-	
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special Provisions: 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **Classification code:** 5F **Tunnel restriction code:** (D) **Remark:** Attention: Gases	**Special Provisions:** 190 | 327 | 344 | 625 **Classification code:** 5F **Remark:** Attention: Gases	**Special Provisions:** 63 | 190 | 277 | 327 | 344 | 381 | 959 **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **EmS-No.:** F-D,S-U **Remark:** Attention: Gases	**Special Provisions:** A145 | A167 **Remark:** Attention: Gases

14.7. Maritime transport in bulk according to IMO instruments
No data available

SECTION 15: Regulatory information

* **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

15.1.1. EU legislation

Authorisations:
Directive 2012/18/EU
Named dangerous substances - ANNEX I: None of the ingredients are included.

Restrictions on use:
Regulation (EC) No 1907/2006 ANNEX XVII Restriction conditions: Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II

: None of the ingredients are included.
Regulation (EU) 2019/1148
Annex I - RESTRICTED EXPORT SUBSTANCES FOR EXPLOSIVES (upper concentration limit for a permit pursuant to Article 5(3)):None of the ingredients are included.
Annex II - EXPLOSIVES REPORTABLE FOR EXPLOSIVES: None of the ingredients are included.
Regulation (EC) No 273/2004 on drug precursors: None of the ingredients are included.
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade in drug precursors between the Community and third countries: None of the ingredients are included.

Other regulations (EU):
Hazard categories:
• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

Named dangerous substances:
• Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:
Volatile organic compounds (VOC) content in percent by weight: 15.53 Vol-%

15.1.2. National regulations
No data available

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

SECTION 16: Other information

* **16.1. Indication of changes**

1.3.	Details of the supplier of the safety data sheet
8.1.	Control parameters
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.2.	Abbreviations and acronyms

* **16.2. Abbreviations and acronyms**

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level

EC_{50}	Effective Concentration 50%
ES	Exposure scenario
EWC	European Waste Catalogue
IC_{50}	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds
ZNS	central nervous system

16.3. Key literature references and sources for data
No data available

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

16.6. Training advice
No data available

16.7. Additional information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.