

**Safety Data Sheet**

according to UK REACH Regulation

143 Kühlsystem-Reinigung 500ml ALL

Revision date: 08.10.2024

Product code: 1107174

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

143 Kühlsystem-Reinigung 500ml ALL

UFI: P5G5-A0SV-8009-WQUP

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

Cleaner

1.3. Details of the supplier of the safety data sheet

Company name: TUNAP GmbH & Co. KG
Street: Buergermeister-Seidl-Strasse 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: 111 NHS (National Health Service)

SECTION 2: Hazards identification**2.2. Label elements****GB CLP Regulation****Special labelling of certain mixtures**

EUH210 Safety data sheet available on request.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|------------|--|--------------|------------------|-----------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 64366-70-7 | Ethoxylated propoxylated 2-ethyl-1-hexanol | | | 3 - < 5 % |
| | Eye Irrit. 2; H319 | | | |
| 111-76-2 | 2-butoxyethanol; ethylene glycol monobutyl ether | | | 1 - < 3 % |
| | 203-905-0 | 603-014-00-0 | | |
| | Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H331 H302 H315 H319 | | | |
| 90170-43-7 | β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | | | 1 - < 3 % |
| | 290-476-8 | | 01-2119976233-35 | |
| | Eye Irrit. 2; H319 | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|------------|-----------|--|-----------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 111-76-2 | 203-905-0 | 2-butoxyethanol; ethylene glycol monobutyl ether | 1 - < 3 % |
| | | inhalation: ATE 3 mg/l (vapours); oral: ATE 1200 mg/kg | |
| 90170-43-7 | 290-476-8 | β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | 1 - < 3 % |
| | | oral: LD50 = > 5000 mg/kg | |

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Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % non-ionic surfactants, < 5 % anionic surfactants.

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. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

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****General advice**

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.

For non-emergency personnel

First aider: Pay attention to self-protection!

For emergency responders

Fight fire with normal precautions from a reasonable distance.

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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**For containment**

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (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**

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|----------|-----------------|-----|-------------------|-----------|---------------|--------|
| 111-76-2 | 2-Butoxyethanol | 25 | 123 | | TWA (8 h) | WEL |
| | | 50 | 246 | | STEL (15 min) | WEL |

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Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|----------|-----------------|--------------------------------|--------------|---------------|---------------|
| 111-76-2 | 2-Butoxyethanol | butoxyacetic acid (creatinine) | 240 mmol/mol | urine | Post shift |

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|------------------------|---|----------------|----------|-----------------------|
| 90170-43-7 | β -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | | | |
| Worker DNEL, long-term | | inhalation | systemic | 980 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 2,67 mg/kg bw/day |

PNEC values

| CAS No | Substance | Value |
|--|---|-----------|
| 90170-43-7 | β -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | |
| Freshwater | | 0,1 mg/l |
| Freshwater (intermittent releases) | | 0,1 mg/l |
| Marine water | | 0,01 mg/l |
| Micro-organisms in sewage treatment plants (STP) | | 0,3 mg/l |

Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long-term exposure:
- 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.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.
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: 480min
Thickness of the glove material 0,45 mm
EN ISO 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:

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Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: P

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | | |
|---|----------------|--------------------|
| Physical state: | liquid | |
| Colour: | yellow-brown | |
| Odour: | characteristic | |
| | | Test method |
| Melting point/freezing point: | not determined | |
| Boiling point or initial boiling point and boiling range: | 100  C | |
| Flammability: | not applicable | |
| | not applicable | |
| Flash point: | | ISO 3679 |
| Auto-ignition temperature: | not determined | |
| Decomposition temperature: | not determined | |
| pH-Value (at 20  C): | 8 | DIN 19268 |
| Viscosity / kinematic: (at 40  C) | | DIN EN ISO 3104 |
| Water solubility: | easily soluble | |
| Solubility in other solvents | | |
| not determined | | |
| Partition coefficient n-octanol/water: | not determined | |
| Vapour pressure: | not determined | |
| Density (at 20  C): | 1,0385 g/cm 3 | DIN 51757 |
| Relative vapour density: | not determined | |

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

| | |
|--------------------------|-----------------|
| Evaporation rate: | not determined |
| Solid content: | not determined |
| Viscosity / dynamic: | DIN 53019-1 |
| Flow time: (at 20  C) | DIN EN ISO 2431 |

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

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No known hazardous reactions.

10.4. Conditions to avoid

none

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 hazard classes as defined in GB CLP Regulation****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.

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) > 12,5 mg/l

| CAS No | Chemical name | | | | |
|------------|--|-------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 111-76-2 | 2-butoxyethanol; ethylene glycol monobutyl ether | | | | |
| | oral | ATE 1200 mg/kg | | | |
| | inhalation vapour | ATE 3 mg/l | | | |
| 90170-43-7 |  -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | | | | |
| | oral | LD50 > 5000 mg/kg | Rat | | |

Irritation and corrosivity

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

Serious eye damage/eye irritation: 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

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.

No indications of human carcinogenicity exist.

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.

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Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

Reference to other sections: 2.1, 4.2.

Specific effects in experiment on an animal

No information available.

11.2. Information on other hazards**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No information available.

Further information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

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

The product is not: Ecotoxic.

| CAS No | Chemical name | | | | | |
|------------|---|-----------------------|-----------|---|--------------|--|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 111-76-2 | 2-butoxyethanol; ethylene glycol monobutyl ether | | | | | |
| | Acute fish toxicity | LC50 1490 mg/l | 96 h | Lepomis macrochirus | | |
| 90170-43-7 | β -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | | | | | |
| | Acute algae toxicity | ErC50 ca. 5,5 mg/l | 72 h | Chlorella vulgaris | Study report | No supporting analysis was performed. No |
| | Acute crustacea toxicity | EC50 97,5 mg/l | 48 h | Daphnia magna | | |
| | Crustacea toxicity | NOEC ca. 10 mg/l | 21 d | Daphnia magna | Study report | OECD Guideline 211 |
| | Acute bacteria toxicity | EC50 ca. 300 mg/l () | 3 h | activated sludge of a predominantly domestic sewage | Study report | OECD Guideline 209 |

12.2. Persistence and degradability

The product has not been tested.

| CAS No | Chemical name | | | |
|------------|---|-------|----|--------|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 64366-70-7 | Ethoxylated propoxylated 2-ethyl-1-hexanol | | | |
| | OECD 301F | > 60% | 28 | |
| | Easily biodegradable (concerning to the criteria of the OECD) | | | |

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|------------|---|-------------|
| 111-76-2 | 2-butoxyethanol; ethylene glycol monobutyl ether | 0,81 (25°C) |
| 90170-43-7 | β -Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts | < 1 |

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12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

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

List of Wastes Code - residues/unused products

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

List of Wastes Code - used product

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)**14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

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Marine pollutant: no

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.**14.4. Packing group:** No dangerous good in sense of this transport regulation.**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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 75

Directive 2010/75/EU on industrial emissions: No information available.

Directive 2004/42/EC on VOC in paints and varnishes: No information available.

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

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): 2,11,12.

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Abbreviations and acronyms

Acute Tox: Acute toxicity
Skin Irrit: Skin irritation
Eye Irrit: Eye irritation
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant H and EUH statements (number and full text)

| | |
|--------|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| EUH210 | Safety data sheet available on request. |

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)