

SAFETY DATA SHEET

In accordance with 1907/2006 Annex II (2015/830) and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Issued 2016-10-11
Replaces issued SDS 2015-09-23
Version number 2.1

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

1.1. Product identifier

Trade name BioCool/BioTab - Pooldesinfektion

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

Identified uses Pool chemicals

1.3. Details of the supplier of the safety data sheet

Company BioCool AB
Gymnasievägen 16,
93157 SKELLEFTEÅ
Sweden
Contact person Jan-olof Eriksson
Telephone +46 70-5831266
E-mail janolof@biocool.se

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irritant (Category 2), H315
Irritates eyes (Category 2), H319
Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp), H335

2.2. Label elements

Hazard pictogram



Signal word Warning
Hazard statements
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
Precautionary statements
P102 Keep out of reach of children
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P311 Call a doctor

2.3. Other hazards

Not indicated.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
DIDECYL DIMETHYL AMMONIUM CHLORIDE		
CAS No: 7173-51-5	Acute Tox 4oral, Skin Corr 1B; H302, H314	3 - 8 %

EC No: 230-525-2 Index No: 612-131-00-6		
PROPAN-2-OL		
CAS No: 67-63-0 EC No: 200-661-7 Index No: 603-117-00-0 REACH: 01-2119457558-25	Flam Liq 2, Eye Irrit 2, STOT SE <i>3drow</i> ; H225, H319, H336	1 - 3 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

Contents according to 648/2004.

5-<15% Cationic surfactants.

5-<15% Disinfectants.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

Never attempt to administer liquid, or anything else, to an unconscious person via the mouth.

Immediately call a POISON CENTER or doctor/physician.

Upon breathing in

Allow the injured person to rest in a warm place with fresh air, seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. Contact a physician.

Upon skin contact

Wash with large quantities of water (emergency shower) and seek medical assistance.

Upon ingestion

Rinse nose, mouth and throat with water.

Immediately drink a couple glasses of water, milk or cream.

Contact a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Upon breathing in

Irritation may occur.

Upon eye contact

Irritates the eyes.

Upon skin contact

Skin irritation may occur.

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

Symptomatic treatment.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

5.2. Special hazards arising from the substance or mixture

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

Avoid that water used for extinguishing fire reaches drains. Water used for extinguishing fire should be handled according to current regulations.

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

Cool closed containers that were exposed to fire with water.

Protective measures should be taken regarding other material at the site of the fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.

Do not inhale the product and avoid exposure to skin and eyes.

Ensure good ventilation.

6.2. Environmental precautions

Avoid discharge into soil, water or sewers.

6.3. Methods and material for containment and cleaning up

Smaller waste can be flushed away with water. Larger spills should be covered with sand or earth and collected. Collected material should be disposed according to Section 13.

6.4. Reference to other sections

Not indicated.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Read and follow the manufacturer's instructions.

Do not inhale the fumes and avoid exposure to skin, eyes and clothing.

Do not eat, drink or smoke in premises where this product is stored.

Store this product separately from food items and keep it out of the reach of children and pets.

Wash your hands after using the product.

Wash contaminated clothing before reuse.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and dry place (above freezing temperature and not greater than 30°C).

Store tightly, in original packaging.

Store in a well-ventilated space.

7.3. Specific end uses

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

PROPAN-2-OL

United Kingdoms (EH40/2005)

Time-weighted-average exposure limit (TWA) 400 ppm / 999 mg/m³

Short term exposure limit (STEL) 500 ppm / 1250 mg/m³

DNEL

PROPAN-2-OL

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	89 mg/m ³
Worker	Chronic Systemic	Dermal	888 mg/kg
Worker	Chronic Systemic	Inhalation	500 mg/m ³
Consumer	Chronic Systemic	Oral	26 mg/kg
Consumer	Chronic Systemic	Dermal	319 mg/kg

PNEC

PROPAN-2-OL

Environmental protection target	PNEC value
Fresh water	140.9 mg/l
Freshwater sediments	552 mg/kg
Marine water	140.9 mg/l
Marine sediments	552 mg/kg
Microorganisms in sewage treatment	2251 mg/l
Soil (agricultural)	28 mg/kg

8.2. Exposure controls

In terms of minimizing risks, attention must be paid to the health hazards (see Sections 2, 3 and 10) of this product or any of its ingredients according to EU directives 89/391 and 98/24 and national occupational legislation.

8.2.1. Appropriate engineering controls

Emergency showers and eye-rinsing facilities must be available at the workplace.

Eye/face protection

Use protective glasses, safety goggles, or a visor.

Skin protection

Use protective gloves of butyl rubber, Viton or fluorine rubber, or get advice from an occupational medical expert about alternative materials. Show this safety data sheet.

Use suitable protective clothing.

Protect all exposed skin from coming into contact with the product.

Respiratory protection

Use proper protective breathing equipment in case of insufficient ventilation.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance	Form: liquid. Colour: light brown.
b) Odour	weak smell
c) Odour threshold	Not applicable
d) pH	Not indicated
e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	Not indicated
l) Vapour density	Not indicated
m) Relative density	Not indicated
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
s) Explosive properties	Not applicable
t) Oxidising properties	Not applicable

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known during normal use.

10.4. Conditions to avoid

Protect from heat.

10.5. Incompatible materials

Avoid contact with strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO).

Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not indicated.

Acute toxicity

The product is not classified as harmful to health.

Not classified as an acutely toxic substance.

DIDECYL DIMETHYL AMMONIUM CHLORIDE

LD50 rat 24h: 329 mg/kg Orally

PROPAN-2-OL

LD50 rabbit 24h: 15800 mg/kg Dermally

LD50 rat 24h: > 12800 mg/kg Dermally

LC50 rat 4h: 72.6 mg Inhalation

LC50 rat 4h: 64000 ppmV Inhalation

LC50 rat 8h: 16000 ppmV Inhalation

LD50 rat 24h: 5045 mg/kg Orally

Skin corrosion/irritation

Irritant to skin.

Serious eye damage/irritation

Irritating to eyes.

Respiratory or skin sensitisation

No hypersensitive reactions have been reported for the substances in this mixture.

Germ cell mutagenicity

Not indicated.

Carcinogenicity

To the best of our knowledge, no carcinogenic effects have been reported for this product.

Reproductive toxicity

As far as we know no mutagenic effects have been reported for any of the ingredients of this product.

STOT-single exposure

May cause irritation to the respiratory tract.

STOT-repeated exposure

No known hazards for repeated exposure.

Aspiration hazard

Not indicated.

SECTION 12: Ecological information

12.1. Toxicity

The product is not to be labelled as an environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

PROPAN-2-OL

LC50 fathead minnow (*Pimephales promelas*) 96h: 9640 mg/L

LC50 Freshwater water flea (*Daphnia magna*) 48h: 2285 mg/L

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 13299 mg/l

LC50 Fish 96h: 1000 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 24h: 10 - 100 mg/l

EC50 Algae 24h: 1 - 10 mg/l

12.2. Persistence and degradability

The product degrades easily in the natural environment.

12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

No chemical safety report has been executed.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Discarded products must be disposed of as hazardous waste in accordance with regulations.

Empty, rinsed packaging is sent for recycling where practicable.

Classification according to 2006/12

Recommended LoW-code: 06 03 14 Solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other information**16a. Indication of where changes have been made to the previous version of the safety data sheet****Revisions of this document**

Earlier versions

2015-09-23 Changes in section(s) 5, 6, 7, 8.

16b. Legend to abbreviations and acronyms used in the safety data sheet**Full texts for Hazard Class and Category Code mentioned in section 3**Acute Tox 4*oral* Acute toxicity (Category 4 oral)

Skin Corr 1B Corrosive (Category 1B)

Flam Liq 2 Flammable liquids (Category 2)

Eye Irrit 2 Irritates eyes (Category 2)

STOT SE 3*drow* Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)**Explanations of the abbreviations in Section 14**

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

16c. Key literature references and sources for data**Sources for data**

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2016-10-11.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006 Annex II (2015/830) COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

648/2004 REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF

EH40/2005	THE COUNCIL of 31 March 2004 on detergents
89/391	EH40/2005 Workplace exposure limits COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
98/24	COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)
2006/12	DIRECTIVE 2006/12/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2006 on waste
1907/2006	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

H302 Acute toxicity (Category 4 oral)

H314 Corrosive (Category 1B)

H225 Flammable liquids (Category 2)

H319 Irritates eyes (Category 2)

H336 Specific target organ toxicity - Single exposure (Category 3, Narcosis effect)

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment
Warning for misuse

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with the directions for use.

Other relevant information

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se