



according to 1907/2006/EC, Article 31

Issue Date: 01.02.2021 Version-no.: 1.01 Revised on: 01.11.2021

Trade Name: Biotensidon S-Cleaner Concentrate

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

1.1 Product identifier

Trade name: Biotensidon S-Cleaner Concentrate

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

Use of the substance/mixture: Ecological detergent for all kinds of signs
Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Supplier: BIOTENSIDON s.r.o. BIOTENSIDON S.A.

Zeyerova 1353 68 Park Ross Ave / Hluhluwe

337 01 Rokycany / Czech KZN / 3960

Tel: +49 151 41 26 55 99 Tel: + 27 72 867 6525 Email: info@biotensidon.eu l.price@biotensidon.world

1.4 Emergency telephone number

+ 27 13 11 26 Poison Centre 24-hour Advice Line + 27 861 555 777 - Poison Information Help Line

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to the Regulation (EC) No. 1272/2008

Skin Sens. 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling according to the Regulation (EC) No. 1272/2008

The product is classified and labelled according to CLP-Regulation.

hazard pictogram:

caution

Signal word:

Hazard-determining components of labelling: Cocamidopropyl-Betaine, orange terpene, orange oil

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary Statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P362+P364 Take off contaminated clothing and wash before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not determined **vPvB:** Not determined





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SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Hazardous ingredients:		
CAS: 61789-40-0	Cocamidopropyl-Betaine	
EC-no.: 263-058-8		
	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic	
	Chronic 3, H412	
CAS: 497-19-8	Sodium carbonate	1 – 3%
EC-no.: 207-838-8		
Index no.: 011-005-00-2	Acute Tox. 4, H332; Eye Irrit. 2, H319	
CAS: 1310-73-2	Sodium hydroxide	0.1 – 1%
EC-no.: 215-185-5		
Index no.: 011-002-00-6	Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	
CAS: 8008-57-9	Orange oil	0.1 – 1%
EC-no.: 616-926-9		
	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400;	
	Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317	
CAS: 8028-48-6	Orange terpene	0.1 – 1%
EC-no.: 232-433-8		
	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411;	
	Skin Irrit. 2, H315; Skin Sens. 1, H317	
Regulation (EC) No. 648/2	004 on detergents/the labelling of ingredients	
Soap, (Yeast-Hempoil-Vege	etableOil condensate)	≥5 – <15%
Rhamnolipids – anionic Biosurfactant		<5%
Fragrances		

Additional remarks:

- The product contains NATURAL RHAMNOLIPIDS, anionic biosurfactants from microbial origin.
- See section 16 for the wording of the listed hazard statements.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

- Take affected persons out of danger area and lay them down.
- Remove any clothing that has been contaminated with the product immediately.
- In case of irregular breathing or respiratory arrest, provide artificial respiration.

After inhalation:

- Supply fresh air

After skin contact:

- Immediately rinse with water.
- In case of persisting skin irritation, consult a doctor.

After contact with eyes:

- Rinse eyes for several minutes under running water with the eyelid open.
- Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion:

- Rinse mouth and then drink plenty of water.





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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:

- CO₂, extinguishing powder or water jet.
- Fight larger fires with water jet or alcohol-resistant foam.
- Use firefighting measures that suit the environment.

Unsuitable extinguishing agents for safety reasons: Water with full jet.

5.2 Special hazards arising from the substance or mixture

- Formation of toxic gases is possible during heating or in case of fire.
- In case of fire, the following can be released: Carbon monoxide, carbon dioxide,phosphorous compounds

5.3 Advice for firefighters

Special protective equipment:

- Wear self-contained breathing apparatus.

Further information:

- Cool endangered receptacles with water spray.
- Collect contaminated extinguishing water separately, do not allow it to enter sewage systems.

SECTION 6: Accidental release measure

6.1 Personal precautions, protective equipment and emergency procedures

- Provide sufficient ventilation.
- Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

- Do not dispose into the sewage systems/surface water/groundwater undiluted.

6.3 Methods and material for containment and cleaning up

- Absorb with liquid-binding material (sand, diatomite, acid binder, universal binder, sawdust).
- Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protective equipment.
- See section 13 for instructions on disposal.





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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Dust formation that cannot be avoided is to be cleaned up regularly.
- Ensure good ventilation/exhaustion at the workplace.
- Avoid the formation of aerosol.

Information on fire and explosion protection: Take precautionary measures against electrostatic charging.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store at temperatures below 12°C Information for storing in one common facility: Not applicable

Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.

Storage class: 10-13 (Further differentiation is renounced, because there is no legal restriction concerning storage in one common facility among the storage classes 10-13.)

Classification according to Industrial Safety Regulation (BetrSichV): -

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:			
CAS: 56-81-5 Glycerin			
AGW (Germany)	Long-term value: 200 E mg/m ³		
	2 (I);DFG, Y		
CAS: 1310-73-2 Sodium hyd	oxide		
MAK (Germany)	See Section IIb		

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

- Do not eat, drink, smoke or sneeze at the workplace.
- Keep away from food, drink and animal feeding stuffs.
- Store work clothing separately.
- Adhere to the usual precautionary measures when dealing with chemicals.

Respiratory protection: Not necessary if room is well-ventilated **Hand protection:**



Protective gloves

- Only use chemical-protective gloves with CE-labelling of category III.
- The glove material must be impermeable and resistant against the product / substance / preparation.
- Choose the glove material by considering the penetration time, permeation rates and degradation.

Glove material





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The selection of the suitable gloves does not only depend on the material, but also on further quality features, which may vary from manufacture to manufacture. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and therefore has to be checked prior to the application.

Penetration time of glove material

The exact penetration time is to be obtained from the glove manufacturer and must be adhered to.

Eye protection:



Tightly sealed safety goggles

Body protection: Protective work wear

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information

- Appearance:

Form: Liquid
Colour: Light yellow
Odour: Characteristic
Odour threshold: Not determined

- **pH-value at 20 °C:** ~ 10.5 +/- 1 (batch-dependent)

- Change in condition:

Melting point/freezing point: Not determined

Initial boiling point/boiling range: 100 °C

Flash Point:

Flammability (solid, gas):

Ignition temperature:

Decomposition temperature:

Not determined

Not determined

- **Explosive properties:** The product is not an explosive substance.

Explosive limits:

Lower: Not applicable Upper: Not applicable

- Oxidising properties: No

Vapor pressure: Not applicable
 Density at 20 °C: 1.1 – 1.12 g/cm³
 Relative density: Not determined
 Vapor density: Not determined
 Evaporation rate: Not determined
 Solubility in/miscibility with water: Fully miscible

- Partition coefficient: n-octanol/water:

8028-48-6	Orange terpene	2.78 – 4.88 logPow (QSAR)





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Viscosity:

Dynamic: 881.7 – 881.9 mPa*S @20°C

Kinematic: Not determined

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

No decomposition if used and stored according to specifications.

Thermal decomposition / Conditions to be avoided:

No decomposition if used according to specifications.

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 hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Classification-relevant LD/LC50-values:		
CAS: 61789-40-0 Cocamidopropyl-Betaine		
Oral	LD50	> 5000 mg/kg (Rat) (OECD Guideline 401)
CAS: 497-19-8 Sodium carbonate		
Oral	LD50	2800 mg/kg (Rat) (OECD Guideline 401)
Dermal	LD50	> 2000 mg/kg (Rabbit) (EPA 16 CFR 1500.40)
Inhalation	LC50 (4h)	2.3 mg/L (Rat) (OECD Guideline 403, inhalation:aerosol)
CAS: 8028-48-6 Orange terpene		
Oral	LD50	> 5000 mg/kg (Rat) (OECD Guideline 401)
Dermal	LD50	> 5000 mg/kg (Rabbit) (OECD Guideline 402)

Primary irritant effect

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: May cause an allergic skin reaction.





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CMR effects(carcinogenicity, mutagenicity and toxicity 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.

 Seproductive toxicity:

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

 STOT-repeated exposure:

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

 STOT-repeated exposure:

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

 Based on available data, the classification criteria are not met.
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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:		
CAS: 61789-40-0 Cocamidopro	pyl-Betaine	
LC50 (96h) (static)	2 mg/L (Fish) (Danio rerio)	
	nominal	
EC50 (48h) (static)	30 mg/L (Algae) (Ulva lactuca)	
	nominal	
	6.4 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)	
	nominal	
NOEC (21d) (static)	0.9 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)	
	nominal	
CAS: 497-19-8 Sodium carbona	te	
LC50 (96h) (static)	300 mg/L (Fish) (Lepomis macrochirus)	
EC50 (48h)	200 - 227 mg/L (Daphnia) (Ceriodaphnia sp.)	
	semi-static semi-static	
CAS: 1310-73-2 Sodium hydrox	ride	
EC50 (48h)	40.4 mg/L (Daphnia) (Ceriodaphnia sp)	
CAS: 8028-48-6 Orange terpen	e	
LL50 (96h)	5.65 mg/L (Fish) (OECD Guideline 203, Danio rerio)	
	semi-static, nominal	
EL50 (48h) (static)	1.1 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna)	
	nominal	
EL50 (72h) (static)	150 mg/L (Algae) (OECD Guideline 201, Desmodesmus subspicatus)	
	Nominal	
NOELR (static)	50 mg/L (Algae) (OECD Guideline 201, Desmodesmus subspicatus) nominal	

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

61789-40-0	Cocamidopropyl-Betaine	70.79 BCF (@ 25°C; calculation)
8028-48-6	Orange terpene	32 - 395 BCF (QSAR)

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment





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Not determined

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Must be specially treated under adherence to official regulations.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number

ADR/RID/ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR/RID/ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA-Class Void

14.4 Packing group

ADR/RID/ADN, IMDG, IATA Void

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

Transport/Additional information: Not a hazardous good according to the above regulations.

UN Model Regulation: Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU

- Hazardous substances as listed in Annex I: None of the ingredients is listed.
- Restrictive conditions according to Regulation (EC) No 1907/2006 Annex XVII: 3

National regulations

Water hazard class: WGK 1 (own classification): slightly hazardous to water

15.2 Chemical safety assessment





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A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information contained herein is based on the present state of our knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant statements

H290: May be corrosive to metals

H304: May be fatal if swallowed and enters airways

H314: Causes severe skin burns and eye damage

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H318: Causes serious eye damage

H319: Causes serious eye irritation

H332: Harmful if inhaled

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

H412: Harmful to aquatic life with long-lasting effects

Abbreviations and acronyms:

 $\label{eq:REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals} \\$

MARPOL: (from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

UN: United Nations (also UNO: United Nations Organization)

NOEC: No Observed Effect Concentration

OECD: Organisation for Economic Co-operation and Development

ASTM: American Society for Testing and Materials

WAF: Water Accommodated Fraction

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

 $v P v B: \ very \ Persistent \ and \ very \ Bioaccumulative$

Flam. Liq. 3: flammable liquids – Category 3

Met. Corr.1: corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/irritation – Category 1

Eye Irrit. 2: Serious eye damage/irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

 ${\sf Asp.\ Tox.\ 1: Aspiration\ hazard-Category\ 1}$

Aquatic Acute 1: Hazardous to the aquatic environment - acute hazard – Category 1 $\,$

 $Aquatic\ Chronic\ 1:\ Hazardous\ to\ the\ aquatic\ environment\ -\ long-term\ hazardous\ to\ the\ aquatic\ environment\ -\ Category\ 1$

Aquatic Chronic 2: Hazardous to the aquatic environment –long-term hazardous to the aquatic environment – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment – long-term hazardous to the aquatic environment – Category 3



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