

Safety Data Sheet

according to 1907/2006/EC, Article 31

Issue Date: 22/05/2019

Version-no.: 1.00

Revised on: 22/05/2019

Trade Name: Biotensidon S-Cleaner – SC-20

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 GmbH
Greschbachstrasse 2-4
76229 Karlsruhe | Germany
Tel: +49 721 909976 11
Fax: +49 721 909976 19
Email: info@biotensidon.de

1.4 Emergency telephone number

+49 30 19 24 0, Poison Center Berlin

+49 228 287 3211, Poison Information Center Bonn

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:

GHS07

Signal word: Caution**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.

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2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not determined

vPvB: Not determined

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Hazardous ingredients:		
CAS: 61789-40-0 EC-no.: 263-058-8	Cocamidopropyl-Betaine <hr/> Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	1 – 5%
CAS: 497-19-8 EC-no.: 207-838-8 Index no.: 011-005-00-2	Sodium carbonate <hr/> Acute Tox. 4, H332; Eye Irrit. 2, H319	.5 – .6%
CAS: 1310-73-2 EC-no.: 215-185-5 Index no.: 011-002-00-6	Sodium hydroxide <hr/> Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	0.02 – .2%
CAS: 8008-57-9 EC-no.: 616-926-9	Orange oil <hr/> Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317	0.02 – .2%
CAS: 8028-48-6 EC-no.: 232-433-8	Orange terpene <hr/> Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	0.02 – .2%
Regulation (EC) No. 648/2004 on detergents/the labelling of ingredients		
Soap, anionic surfactants		≥1 – <3%
Phosphonates, phosphates		<1%
Fragrances		

Additional remarks:

- The product contains **RHAPYNAL®**, 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.

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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.

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.

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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.

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 hydroxide	
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.

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- 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

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:** Not determined
- **Flammability (solid, gas):** Not applicable
- **Ignition temperature:** Not determined
- **Decomposition temperature:** 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

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- **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)

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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.

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.
- **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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
CAS: 61789-40-0 Cocamidopropyl-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 carbonate	
LC50 (96h) (static)	300 mg/L (Fish) (Lepomis macrochirus)
EC50 (48h)	200 - 227 mg/L (Daphnia) (Ceriodaphnia sp.) semi-static
CAS: 1310-73-2 Sodium hydroxide	
EC50 (48h)	40.4 mg/L (Daphnia) (Ceriodaphnia sp)
CAS: 8028-48-6 Orange terpene	
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)

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12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

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

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National regulations

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

15.2 Chemical safety assessment

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:

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
vPvB: 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

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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
