

## Safety Data Sheet

according to 1907/2006/EC, Article 31

Issue Date: 01/02/2021

Version-no.: 1.01

Revised on: 01/11/2021

Trade Name: BIOTENSIDON Plastic Cleaner Concentrate

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

#### 1.1 Product identifier

Trade name: BIOTENSIDON Plastic Cleaner Concentrate

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

Use of the substance/mixture: Ecological detergent for plastics

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: <a href="mailto:info@biotensidon.eu">info@biotensidon.eu</a>	<a href="mailto:l.price@biotensidon.world">l.price@biotensidon.world</a>

#### 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:

Signal word:

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

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: 111-76-2 EC-no.: 203-905-0 Index no.: 603-014-00-0	2-Butoxy-ethanol <hr/> Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	<1,2 %
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	1 – 2,6%
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 – 3%
CAS: 67-63-0 EC-no.: 200-661-7 Index no.: 603-117-00-0	Propan-2-ol <hr/> Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	1 – 3%
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	0.1 – 0,5%
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	0.1 – 0,5%
Regulation (EC) No. 648/2004 on detergents/the labelling of ingredients		
Soap (YEAST-HEMP-Vegetable-OIL CONDENSATE)		≥5 – <15%
Anionic Biosurfactant - RHAMNOLIPIDS		<5%
Fragrances		

#### Additional remarks:

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

### 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.

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- 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:**

- CO<sub>2</sub>, 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

### **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.
- Avoid dust formation.
- Keep sources of ignition 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 mechanically.
- 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

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

#### Information on fire and explosion protection:

- Dust may form explosive mixture with air.
- Keep away from sources of ignition - No smoking.
- Take precautionary measures against electrostatic charging.

#### 7.2 Conditions for safe storage, including any incompatibilities

##### Storage:

**Requirements to be met by storerooms and receptacles:** Store only in the original container/receptacle.

**Information for storing in one common facility:** Keep away from oxidising agents.

**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:	
<b>CAS: 111-76-2 2-Butoxy-ethanol</b>	
AGW (Germany)	Long-term value: 49 mg/m <sup>3</sup> , 10 ml/m <sup>3</sup> 4(II);EU, H, Y, AGS
IOELV (European Union)	Short-term value: 246 mg/m <sup>3</sup> , 50 ml/m <sup>3</sup> Long-term value: 98 mg/m <sup>3</sup> , 20 ml/m <sup>3</sup> Skin
<b>CAS: 67-63-0 Propan-2-ol</b>	
AGW (Germany)	Long-term value: 500 mg/m <sup>3</sup> , 200 ml/m <sup>3</sup> 2(II);DFG, Y

Components with biological limit values:	
<b>CAS: 111-76-2 2-Butoxy-ethanol</b>	
BGW (Germany)	150 mg/g creatinine Test material: urine Sample collection time: end of exposure or shift, for long-term exposure: at the end of the shift after several previous shifts Parameter: Butoxyacetic acid (after hydrolysis)
<b>CAS: 67-63-0 Propan-2-ol</b>	
BGW (Germany)	25 mg/l Test material: whole blood Sample collection time: end of exposure or shift Parameter: Acetone

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	25 mg/l Test material: urine Sample collection time: end of exposure or shift Parameter: Acetone
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### 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

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:** Protective 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 +/- 1.0 (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 determined

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- **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/cm<sup>3</sup>
- **Relative density:** Not determined
- **Vapor density:** Not determined
- **Evaporation rate:** Not determined
- **Solubility in/miscibility with water:** Fully miscible
- **Partition coefficient: n-octanol/water:**

111-76-2	2-Butoxy-ethanol	0.81 logPow @ 25°C (pH 7)
67-63-0	Propan-2-ol	0.05 logPow @ 25°C
8028-48-6	Orange terpene	2.78 – 4.88 logPow (QSAR)

- **Viscosity:**
  - Dynamic:** 36.1-36.2
  - Kinematic at 20 °C:** 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

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### 11.1 Information on toxicological effects

**Acute toxicity:**

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

Classification-relevant LD/LC50-values:		
<b>CAS: 111-76-2 2-Butoxy-ethanol</b>		
Oral	LD50	1414 mg/kg (Guinea Pig) (OECD Guideline 401)
Dermal	LD50	> 2000 mg/kg (Rat) (OECD Guideline 402)
<b>CAS: 497-19-8 Sodium carbonate</b>		
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)
<b>CAS: 61789-40-0 Cocamidopropyl-Betaine</b>		
Oral	LD50	> 5000 mg/kg (Rat) (OECD Guideline 401)
<b>CAS: 67-63-0 Propan-2-ol</b>		
Oral	LD50	5840 mg/kg (Rat) (OECD Guideline 401)
Inhalation	LC50 (4h)	> 10000 ppmV (Rat) (OECD Guideline 403, inhalation:vapour)
<b>CAS: 8028-48-6 Orange terpene</b>		
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.

**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:	
<b>CAS: 111-76-2 2-Butoxy-ethanol</b>	
LC50 (96h) (static)	1474 mg/L (Fish) (OECD Guideline 203, Oncorhynchus mykiss) nominal
EC50 (48h) (static)	1550 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna) nominal
EC50 (72h) (static)	1840 mg/L (Algae) (OECD Guideline 201, Pseudokirchneriella subcapitata) nominal
NOEC (21d)	100 mg/L (Daphnia) (OECD Guideline 211, Daphnia magna) semi-static nominal > 100 mg/L (Fish) (OECD Guideline 204, Danio rerio) semi-static nominal
NOEC (72h) (static)	286 mg/L (Algae) (OECD Guideline 201, Pseudokirchneriella subcapitata)

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	nominal
<b>CAS: 497-19-8 Sodium carbonate</b>	
LC50 (96h) (static)	300 mg/L (Fish) (Lepomis macrochirus)
EC50 (48h)	200 - 227 mg/L (Daphnia) (Ceriodaphnia sp.) semi-static
<b>CAS: 61789-40-0 Cocamidopropyl-Betaine</b>	
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
<b>CAS: 67-63-0 Propan-2-ol</b>	
LC50 (96h) (dynamic)	9640 mg/L (Fish) (OECD Guideline 203, Pimephales promelas)
EC50 (24h) (static)	> 10000 mg/L (Daphnia) (OECD Guideline 202, Daphnia magna) nominal
<b>CAS: 8028-48-6 Orange terpene</b>	
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**

Not determined

### **12.6 Other adverse effects**

No further relevant information available.

## SECTION 13: Disposal considerations

### **13.1 Waste treatment methods**

**Recommendation:** Disposal must be made according to official regulations.



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### 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

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

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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

H302 Harmful if swallowed  
H304 May be fatal if swallowed and enters airways  
H312 Harmful in contact with skin  
H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H319 Causes serious eye irritation  
H332 Harmful if inhaled  
H336 May cause drowsiness or dizziness  
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. 2: flammable liquids – Category 2  
Flam. Liq. 3: flammable liquids – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
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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