



## Safety Data Sheet

according to UK REACH Regulation

### Blutoxol

Revision date: 12.12.2022

Product code: j5503\_sd

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#### Pictograms:



#### Hazard statements

- H314 Causes severe skin burns and eye damage.  
 H400 Very toxic to aquatic life.  
 H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

- P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.

#### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

according to 648/2004/CE: nonionic surfactants <5%, organic salts, inorganic salts, biocides, dyes

#### Hazardous components

| CAS No     | Chemical name  |              |                  | Quantity  |
|------------|--|--------------|------------------|-----------|
|            | EC No  | Index No     | REACH No         |           |
|            | Classification (GB CLP Regulation)   |              |                  |           |
| 69011-36-5 | i-C13-Fatty alcohol polyglycol ethers 5-12 EO  |              |                  | 1 - < 5 % |
|            | 931-138-8  |              |                  |           |
|            | Acute Tox. 4, Eye Dam. 1; H302 H318  |              |                  |           |
| 7173-51-5  | didecyldimethylammonium chloride   |              |                  | 1 - < 5 % |
|            | 230-525-2  | 612-131-00-6 | 01-2119945987-15 |           |
|            | Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H302 H314 H318<br>H400 H411 |              |                  |           |
| 1312-76-1  | Potassium silicate   |              |                  | 1 - < 5 % |
|            | 215-199-1  |              | 01-2119456888-17 |           |
|            | Met. Corr. 1, Skin Corr. 1B; H290 H314   |              |                  |           |
| 68391-01-5 | C12-C18-Dimethylbenzyl ammonium chloride   |              |                  | 1 - < 5 % |
|            | 269-919-4  |              |                  |           |
|            | Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H400 H410                     |              |                  |           |

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

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#### Specific Conc. Limits, M-factors and ATE

| CAS No     | EC No     | Chemical name   | Quantity  |
|------------|-----------|---|-----------|
|            |           | Specific Conc. Limits, M-factors and ATE  |           |
| 69011-36-5 | 931-138-8 | i-C13-Fatty alcohol polyglycol ethers 5-12 EO                                       | 1 - < 5 % |
|            |           | oral: ATE = 500 mg/kg Eye Dam. 1; H318: >= 10 - 100 Eye Irrit. 2; H319: >= 6 - < 10 |           |
| 7173-51-5  | 230-525-2 | didecyldimethylammonium chloride  | 1 - < 5 % |
|            |           | dermal: LD50 = >2000 mg/kg; oral: LD50 = 329 mg/kg Aquatic Acute 1; H400: M=10      |           |
| 68391-01-5 | 269-919-4 | C12-C18-Dimethylbenzyl ammonium chloride  | 1 - < 5 % |
|            |           | oral: ATE = 500 mg/kg Aquatic Acute 1; H400: M=10<br>Aquatic Chronic 1; H410: M=1   |           |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Avoid contact with skin and eyes.

#### After inhalation

not hazardous by inhalation

#### After contact with skin

Wash off immediately with soap and plenty of water. Take off all contaminated clothing immediately.

#### After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.

If eye irritation persists, consult a specialist.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible.

Consult a physician.

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

This information is not available.

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

If you feel unwell, seek medical advice (show the label where possible).

Show this safety data sheet to the doctor in attendance.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Any extinguishing means and measures are acceptable.

### 5.2. Special hazards arising from the substance or mixture

This information is not available.

### 5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Avoid contact with skin, eyes and clothing.

#### For non-emergency personnel

Use personal protection equipment.

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#### For emergency responders

Use personal protection equipment.

#### 6.2. Environmental precautions

Do not flush into surface water.

#### 6.3. Methods and material for containment and cleaning up

##### For containment

Stop leak if safe to do so. Cover drains.

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

##### For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Clean contaminated articles and floor according to the environmental legislation.

##### Other information

Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water.

Never return spills in original containers for re-use.

#### 6.4. Reference to other sections

Refer to protective measures listed in sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the application area.

Wash hands after handling.

#### Advice on protection against fire and explosion

No special protective measures against fire required.

#### Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice.

Use protective skin cream before handling the product.

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

#### Requirements for storage rooms and vessels

Store at room temperature in the original container. Store in a place accessible by authorized persons only.

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Do not store near acids.

#### Further information on storage conditions

Keep container tightly closed.

Never return unused material to storage receptacle.

Protect from frost. Keep away from direct sunlight.

### 7.3. Specific end use(s)

This information is not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls

#### Appropriate engineering controls

Not required.

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#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166

##### Hand protection

Protective gloves

Recommendation: Nature latex gloves with parts of polychloropren latex and a coating thickness of 0.6 mm which protect at least 8 hours (corresponds to the permeability level 6 of the European norm DIN/EN 374) and provide a resistance to swelling of < 15%.

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

Not required

##### Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                 |                |
|-----------------|----------------|
| Physical state: | liquid         |
| Colour:         | light red      |
| Odour:          | characteristic |

#### Test method

|   |                        |           |
|---|------------------------|-----------|
| Melting point/freezing point:                             | <0 °C                  |           |
| Boiling point or initial boiling point and boiling range: | >98 °C                 |           |
| Flammability:   | not applicable         |           |
| Lower explosion limits:                                   | not applicable         |           |
| Upper explosion limits:                                   | not applicable         |           |
| Flash point:  | >100 °C                |           |
| Auto-ignition temperature:                                | >300 °C                |           |
| Decomposition temperature:                                | not determined         |           |
| pH-Value (at 20 °C):                                      | approx. 13,0           | K-QP1012C |
| Viscosity / kinematic:                                    | not determined         |           |
| Water solubility:<br>(at 20 °C)                           | completely miscible    |           |
| Solubility in other solvents                              | not determined         |           |
| Partition coefficient n-octanol/water:                    | not determined         |           |
| Vapour pressure:  | not determined         |           |
| Density (at 20 °C):                                       | 1,03 g/cm <sup>3</sup> | K-QP1012E |
| Relative vapour density:                                  | not determined         |           |
| Particle characteristics:                                 | not applicable         |           |

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

Not explosive

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not relevant

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#### Other safety characteristics

|                      |                |
|----------------------|----------------|
| Evaporation rate:    | not determined |
| Solid content:       | not determined |
| Sublimation point:   | not applicable |
| Softening point:     | not applicable |
| Pour point:          | not applicable |
| Viscosity / dynamic: | not determined |
| Flow time:           | not determined |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This information is not available.

### 10.2. Chemical stability

This information is not available.

### 10.3. Possibility of hazardous reactions

This information is not available.

### 10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.

### 10.5. Incompatible materials

This information is not available.

### 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

#### Further information

Do not mix with other detergents or chemicals.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### Acute toxicity

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

Acute oral toxicity (LD50): 14760 mg/kg (rat)

Acute dermal toxicity (LD50): 133680 mg/kg (rabbit)

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No     | Chemical name                                 |                  |         |        |                         |
|------------|---|------------------|---------|--------|-------------------------|
|            | Exposure route                                | Dose             | Species | Source | Method                  |
| 69011-36-5 | i-C13-Fatty alcohol polyglycol ethers 5-12 EO |                  |         |        |                         |
|            | oral  | ATE 500 mg/kg    |         |        |                         |
| 7173-51-5  | didecyldimethylammonium chloride              |                  |         |        |                         |
|            | oral  | LD50 329 mg/kg   | rat     |        | OECD Test Guideline 401 |
|            | dermal  | LD50 >2000 mg/kg | rat     |        |                         |
| 68391-01-5 | C12-C18-Dimethylbenzyl ammonium chloride      |                  |         |        |                         |
|            | oral  | ATE 500 mg/kg    |         |        |                         |

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#### Irritation and corrosivity

Causes severe skin burns and eye damage.

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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.

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

This information is not available.

##### Further information

Health injuries are not known or expected under normal use.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Very toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

Toxicity to fish (LC50): 38,6 mg/l (Oncorhynchus mykiss (rainbow trout))

Toxicity to fish (NOEC): 1,28 mg/l (Brachydanio rerio (zebra fish))

LC50/96h/bluegill sunfish = 20,6 mg/l

EC50/48h/daphnia = 2,00 mg/l

Toxicity to daphnia (NOEC): 0,284 mg/l (Daphnia magna (Water flea))

EC50/96h/green algae = 1,50 mg/l

Toxicity to bacteria (EC50): 375 mg/l

EC10/18h/bacteria = 5,20 mg/l

Toxicity to soil dwelling organisms.: 161400 mg/kg (Eisenia fetida (earthworms))

| CAS No    | Chemical name                    |      |           |         |                         |        |
|-----------|----------------------------------|------|-----------|---------|-------------------------|--------|
|           | Aquatic toxicity                 | Dose | [h]   [d] | Species | Source                  | Method |
| 7173-51-5 | didecyldimethylammonium chloride |      |           |         |                         |        |
|           | Acute fish toxicity              | LC50 | 0,5 mg/l  | 96 h    | Danio rerio (zebrafish) |        |
|           | Acute crustacea toxicity         | EC50 | 0,03 mg/l | 48 h    | Daphnia                 |        |

#### 12.2. Persistence and degradability

The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.

#### 12.3. Bioaccumulative potential

This information is not available.

#### 12.4. Mobility in soil

This information is not available.

#### 12.5. Results of PBT and vPvB assessment

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

#### 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

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This information is not available.

#### Further information

Chemical Oxygen Demand (COD) 340 mg O<sub>2</sub>/g.

Cationic compounds are biodegradable only in high dilution. They are adequate diluted in sewage and become inactive through contact with other waste-water substances. Therefore solutions could be disposed of in the sewerage system.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Container should be emptied thoroughly. Do not pour remains of product in large quantities into the sewage.

##### List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

##### List of Wastes Code - used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

##### Contaminated packaging

Clean container with water. Return cleaned containers to the company for recycling.  
Offer rinsed packaging material to local recycling facilities.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 1719  |
| <b>14.2. UN proper shipping name:</b>    | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium silicate, solution) |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 8  |



|                          |     |
|--------------------------|-----|
| Classification code:     | C5  |
| Special Provisions:      | 274 |
| Limited quantity:        | 5 L |
| Excepted quantity:       | E1  |
| Transport category:      | 3   |
| Hazard No:               | 80  |
| Tunnel restriction code: | E   |

#### Marine transport (IMDG)

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 1719  |
| <b>14.2. UN proper shipping name:</b>    | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium silicate, solution) |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | III  |
| Hazard label:                            | 8  |



|                     |          |
|---------------------|----------|
| Special Provisions: | 223, 274 |
| Limited quantity:   | 5 L      |
| Excepted quantity:  | E1       |



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EmS: F-A, S-B  
Segregation group: alkalis

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: quaternary ammonium compounds

#### 14.6. Special precautions for user

Not required

#### 14.7. Maritime transport in bulk according to IMO instruments

Not relevant

### 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 3, Entry 75

##### National regulatory information

Water hazard class (D): 2 - obviously 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): 3 / 6 / 7 / 8 / 12

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#### Abbreviations and acronyms

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 Harmonized 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  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
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  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
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  
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)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
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 table at <http://abbrev.esdscom.eu>

Met. Corr: Corrosive to metals

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Eye Dam: Eye damage

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification          | Classification procedure |
|-------------------------|--------------------------|
| Skin Corr. 1B; H314     | Calculation method       |
| Aquatic Acute 1; H400   | Calculation method       |
| Aquatic Chronic 3; H412 | Calculation method       |

#### Relevant H and EUH statements (number and full text)

|      |  |
|------|--|
| H290 | May be corrosive to metals.              |
| H302 | Harmful if swallowed.                    |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage.               |

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|      |   |
|------|---|
| 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.    |

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