

## Safety Data Sheet

according to UK REACH Regulation

### Blutoxol

Revision date: 12.12.2022

Product code: j5503\_sd

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

### 1.1. Product identifier

Blutoxol

UFI: H940-G08W-700G-WJ1N

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

#### Use of the substance/mixture

Product for professional disinfection

### 1.3. Details of the supplier of the safety data sheet

Company name: JOHANNES KIEHL KG  
Street: Robert-Bosch-Str. 9  
Place: D-85235 Odelzhausen  
Telephone: +49 8134 9305-0 Telefax: +49 8134 6466  
e-mail: info@kiehl-group.com  
Contact person: Laboratory department  
Internet: www.kiehl-group.com  
Responsible Department: Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240  
Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43  
Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145  
Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59  
Numero d' emergenza Italia: Centro Antiveneni - 20162 Milano: 02/66101029  
ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest,  
Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199  
Eesti: Häirekeskuse number: 112 / Mürgistusteabekeskuse number: 16662  
Emergency telephone number for all other countries: +49/8134/9305-169

KIEHL Austria GmbH	Perfektastr. 57;	A-1230 Wien	Tel. +43 (0) 1 / 604 99 93
KIEHL FRANCE S.A.R.L.	5, rue de Londres;	F-67670 Mommenheim	Tél. +33 (0) 3.88.59.52.25
KIEHL Italia s.r.l.	Via San Rocco, 101;	I-16036 Recco (GE)	Tel. +39 / 0185 730 008
KIEHL Schweiz AG	St. Dionys-Str. 33;	CH-8645 Jona	Tel. +41 (0) 55 / 254 74 74
KIEHL Hungary Kft.	Felsőipari körút 3/ D	HU-2142 Nagytarcsa	Tel. +36 (0) 1 / 348-08 41
KIEHL Middle East LLC	A8-LIU 48/49 - KIZAD	Abu Dhabi, U.A.E.	Tel. +971 2 550 33 96

### 1.4. Emergency telephone number: +49/89/19240 (germanophone and anglophone)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Skin Corr. 1B; H314  
Aquatic Acute 1; H400  
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

#### Hazard components for labelling

Potassium Silicate / Benzalkonium Chloride

Signal word: Danger

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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 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 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		
Solid/liquid:	not applicable	
Gas:	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: (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	

### 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)

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			

#### Irritation and corrosivity

Causes severe skin burns and eye damage.

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#### 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	didecyltrimethylammonium 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

This information is not available.

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**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)**

**14.1. UN number or ID number:** UN 1719  
**14.2. UN proper shipping name:** CAUSTIC ALKALI LIQUID, N.O.S. (Potassium silicate, solution)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** 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)**

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



Special Provisions: 223, 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-A, S-B



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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

#### **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

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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>

#### 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.
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.)*