

# SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended  
by UK REACH Regulations SI 2019/758



## **UnoDent Surgical Instr.Cleanser**

**No Change Service!**

Version  
07.07

Revision Date:  
13.11.2023

Date of last issue: 05.09.2022

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

#### **1.1 Product identifier**

Trade name : UnoDent Surgical Instr.Cleanser  
Unique Formula Identifier (UFI) : 2Q00-70AS-500T-49GM

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

Use of the Sub-stance/Mixture : Disinfectants  
  
Recommended restrictions on use : Restricted to professional users.

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

Producer : Schülke & Mayr GmbH  
Robert-Koch-Str. 2  
  
22851 Norderstedt  
Germany  
Telephone: +49 (0)40/ 52100-0  
Telefax: +49 (0)40/ 52100318  
mail@schuelke.com  
www.schuelke.com  
  
Supplier : Schülke & Mayr UK Ltd.  
Cygnet House  
1, Jenkin Road  
  
Sheffield S9 1AT  
United Kingdom  
Telephone: +44 114 254 35 00  
Telefax: +44 114 254 35 01  
mail.uk@schulke.com  
  
E-mail address of person responsible for the SDS/Contact person : Application Specialists  
+49 (0)40/ 521 00 666  
AD@schuelke.com

#### **1.4 Emergency telephone number**

Emergency telephone number : Carechem 24 International: +44 1235 239670

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## SECTION 2: Hazards identification





### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Sub-category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

Hazard pictograms	:	   
Signal word	:	Danger
Hazard statements	:	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H373 May cause damage to organs (Gastrointestinal tract, Immune system) through prolonged or repeated exposure if swallowed. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	<b>Prevention:</b> P260 Do not breathe vapours. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. <b>Response:</b> P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or show-

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er.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously  
with water for several minutes. Remove contact lenses, if pre-  
sent and easy to do. Continue rinsing. Immediately call a  
POISON CENTER/ doctor.

Hazardous components which must be listed on the label:

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-  
aminium acetate and {[3-(C12-C16 (even  
numbered)alkylamino)propyl]amino}(imino)methanaminium  
acetate and [(3-[[ammonio(imino)methyl]amino}propyl)-C12-C16  
(even numbered)alkylamino](imino)methanaminium diacetate  
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched  
Amines, N-C12-14-alkyltrimethylenedi-  
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

### Additional Labelling

The product is classified in accordance with Annex I (2.6.4.5) to Regulation  
(EC) 1272/2008.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumula-  
tive and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or  
higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

#### Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
1-phenoxypropan-2-ol	770-35-4 212-222-7 - - - 01-2119486566-23-XXXX	Eye Irrit. 2; H319	>= 30 - < 50
C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium	- - - 939-650-3 - - - 01-2119980967-14-XXXX	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic	>= 10 - < 20

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ium diacetate		aquatic toxicity): 1	
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched	69011-36-5 500-241-6 --- ---	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412  specific concentra- tion limit Eye Dam. 1; H318 > 10 % Eye Irrit. 2; H319 > 1 - < 10 %	>= 10 - < 20
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 1 - < 10
Amines, N-C12-14-alkyltrimethylenedi-	90640-43-0 292-562-0 --- 01-2119957843-25-XXXX	Acute Tox. 3; H301 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT RE 1; H372 (Gastrointestinal tract, Immune sys-tem) Aquatic Acute 1; H400 Aquatic Chronic 2; H411  M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 1	>= 5 - < 10
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1 270-325-2 --- 01-2119965180-41-XXXX	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	>= 2.5 - < 3
propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25-	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous	>= 1 - < 10

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	XXXX	system)	
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For explanation of abbreviations see section 16.

### Other information

CAS 68424-85-1 CORRESPONDS TO  
REACH: EC 939-253-5  
BPR: EC 269-919-4/ CAS 68391-01-5

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.
- If inhaled : If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.  
If symptoms persist, call a physician.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Obtain medical attention.
- If swallowed : Do NOT induce vomiting.  
Rinse mouth with water.  
Give small amounts of water to drink.  
Obtain medical attention.

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

- Symptoms : Treat symptomatically.
- Risks : Harmful if swallowed.  
Causes serious eye damage.  
May cause damage to organs through prolonged or repeated exposure.  
Causes severe burns.

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

- Treatment : For specialist advice physicians should contact the Poisons Information Service.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Dry powder  
Foam  
Carbon dioxide (CO<sub>2</sub>)

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Water spray jet

Unsuitable extinguishing media : Do NOT use water jet.

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

Specific hazards during fire-fighting : none

Hazardous combustion products : No hazardous combustion products are known

### **5.3 Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## **SECTION 6: Accidental release measures**

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

Personal precautions : Increased risk of slipping in the presence of leaked / spilled product.  
Use personal protective equipment.

### **6.2 Environmental precautions**

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### **6.4 Reference to other sections**

see Section 8 + 13

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Advice on safe handling : Never mix concentrates directly.

Advice on protection against fire and explosion : No special protective measures against fire required.

Hygiene measures : Keep away from food and drink.

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

Requirements for storage areas and containers : Store at room temperature in the original container.

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Further information on storage conditions : Keep away from direct sunlight. Keep away from heat. Keep container tightly closed. Recommended storage temperature: -5 - 25°C

Advice on common storage : No materials to be especially mentioned.

### 7.3 Specific end use(s)

Specific use(s) : none

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m <sup>3</sup>	GB EH40
propan-2-ol	67-63-0	TWA	400 ppm 999 mg/m <sup>3</sup>	GB EH40
		STEL	500 ppm 1,250 mg/m <sup>3</sup>	GB EH40

#### Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
1-phenoxypropan-2-ol	Workers	Inhalation	Long-term systemic effects	25.7 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	42 mg/kg
C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-{[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate	Workers	Inhalation	Long-term systemic effects	0.88 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	1 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha.-	Workers	Inhalation	Long-term systemic effects	294 mg/m <sup>3</sup>

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tridecyl-.omega.-hydroxy-, branched ethanol	Workers	Inhalation	Acute local effects	1900 mg/m3
	Workers	Skin contact	Long-term systemic effects	343 mg/kg
	Workers	Inhalation	Long-term systemic effects	950 mg/m3
Amines, N-C12-14-alkyltrimethylenedi-	Workers	Inhalation	Long-term systemic effects	0.0395 mg/m3
	Workers	Dermal	Long-term systemic effects	0.0056 mg/kg bw/day
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Workers	Skin contact	Long-term systemic effects	5.7 mg/kg
	Workers	Inhalation	Long-term systemic effects	3.96 mg/m3
propan-2-ol	Workers	Skin contact	Long-term systemic effects	888 mg/kg
	Workers	Inhalation	Long-term systemic effects	500 mg/m3

### Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
1-phenoxypropan-2-ol	Fresh water	0.1 mg/l
	Marine water	0.01 mg/l
	Fresh water sediment	0.38 mg/kg
	Marine sediment	0.038 mg/kg
	Soil	0.02 mg/kg
	Effects on waste water treatment plants	10 mg/l
C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-{[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate	Fresh water	0.0004 mg/l
	Marine water	0.00004 mg/l
	Effects on waste water treatment plants	1 mg/l
	Fresh water sediment	10 mg/kg
	Marine sediment	1 mg/kg
	Soil	3.7 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched	Fresh water	0.074 mg/l
	Marine water	0.0074 mg/l



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	Intermittent use/release	0.015 mg/l
	Sewage treatment plant	1.4 mg/l
	Soil	0.1 mg/kg
	Fresh water sediment	0.604 mg/kg
	Marine sediment	0.0604 mg/kg
ethanol	Fresh water	0.96 mg/l
	Marine water	0.79 mg/l
	Fresh water sediment	3.6 mg/kg
	Soil	0.63 mg/kg
	Marine sediment	2.9 mg/kg
	Sewage treatment plant	580 mg/l
Amines, N-C12-14-alkyltrimethylenedi-	Fresh water	0.0032 mg/l
	Marine water	0.00032 mg/l
	Sewage treatment plant	0.205 mg/l
	Intermittent use/release	0.00065 mg/l
	Marine sediment	0.172 mg/kg dry weight (d.w.)
	Fresh water sediment	1.72 mg/kg dry weight (d.w.)
	Soil	10 mg/kg dry weight (d.w.)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Fresh water	0.0009 mg/l
	Marine water	0.00009 mg/l
	Fresh water sediment	12.27 mg/kg
	Marine sediment	13.09 mg/kg
	Soil	7 mg/kg
	Effects on waste water treatment plants	0.4 mg/l
	Intermittent use/release	0.00016 mg/l
propan-2-ol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	Soil	28 mg/kg
	Intermittent use/release	140.9 mg/l
	Effects on waste water treatment plants	2251 mg/l
	Oral	160 mg/kg food

## 8.2 Exposure controls

### Engineering measures

Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Directive : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g.

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Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protection.

- Skin and body protection : Work uniform or laboratory coat.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Protective measures : Avoid contact with skin and eyes.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : green
- Odour : amine-like
- Odour Threshold : not determined
- pH : 9.1 - 9.5 (20 °C)  
Concentration: 100 %
- Melting point/freezing point : < -5 °C
- Decomposition temperature : No data available
- Boiling point/boiling range : ca. 90 °C
- Flash point : 40.5 °C  
Method: ISO 3679
- Evaporation rate : No data available
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available
- Relative vapour density : No data available
- Density : ca. 0.99 g/cm<sup>3</sup> (20 °C)
- Solubility(ies)  
Water solubility : completely soluble (20 °C)

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Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	ca. 30 mPa*s (20 °C) Method: DIN 54453
Viscosity, kinematic	:	not determined
Explosive properties	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

### **9.2 Other information**

Flammability (liquids)	:	Does not sustain combustion.
Refractive index	:	1.455 - 1.461
Metal corrosion rate	:	< 6.25 mm/a Not corrosive to metals

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## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

### **10.2 Chemical stability**

The product is chemically stable.

### **10.3 Possibility of hazardous reactions**

Hazardous reactions : None reasonably foreseeable.

### **10.4 Conditions to avoid**

Conditions to avoid : Protect from frost, heat and sunlight.

### **10.5 Incompatible materials**

Materials to avoid : Incompatible with acids.

### **10.6 Hazardous decomposition products**

None reasonably foreseeable.

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## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

Harmful if swallowed.

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### **Product:**

Acute oral toxicity : Acute toxicity estimate: 1,195 mg/kg  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

### **Components:**

#### **1-phenoxypropan-2-ol:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.4 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-{[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg  
Assessment: Harmful if swallowed.

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

#### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50: > 5,000 mg/kg  
Method: literature value

#### **ethanol:**

Acute oral toxicity : LD50 (Mouse): 8,300 mg/kg

Acute inhalation toxicity : LC50 (Mouse): 39 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

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Acute dermal toxicity : LD50 (Rabbit): 20,000 mg/kg

### Amines, N-C12-14-alkyltrimethylenedi-:

Acute oral toxicity : LD50 (Rat, female): 200 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg  
Method: OECD Test Guideline 401  
Assessment: Harmful if swallowed.

Acute inhalation toxicity : LC50 (Rat): > 2 mg/l  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): 1,100 mg/kg  
Assessment: Harmful in contact with skin.

### propan-2-ol:

Acute oral toxicity : LD50 (Rat): 5,840 mg/kg

Acute inhalation toxicity : LC50 (Rat): 39 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 13,900 mg/kg  
Method: OECD Test Guideline 402

### Skin corrosion/irritation

Causes severe burns.

### Components:

#### 1-phenoxypropan-2-ol:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-  
aminium acetate and {[3-(C12-C16 (even  
numbered)alkylamino)propyl]amino}(imino)methanaminium  
acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16  
(even numbered)alkylamino](imino)methanaminium diacetate:

Species : Rabbit  
Exposure time : 4 h

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Method : OECD Test Guideline 404  
Result : Corrosive after 1 to 4 hours of exposure

### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

### **ethanol:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

### **Amines, N-C12-14-alkyltrimethylenedi-:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Corrosive after 3 minutes to 1 hour of exposure

### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Species : Rabbit  
Result : Corrosive after 3 minutes to 1 hour of exposure  
GLP : no

### **propan-2-ol:**

Result : No skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### **Components:**

#### **1-phenoxypropan-2-ol:**

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : Eye irritation

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-  
aminium acetate and {[3-(C12-C16 (even  
numbered)alkylamino)propyl]amino}(imino)methanaminium  
acetate and [(3-{[ammonio(imino)methyl]amino}propyl)-C12-C16  
(even numbered)alkylamino](imino)methanaminium diacetate:

Species : Rabbit  
Method : OECD Test Guideline 405  
Result : Irreversible effects on the eye

### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched:**

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Species	: Rabbit
Method	: Draize Test
Result	: Irreversible effects on the eye

### **ethanol:**

Method	: OECD Test Guideline 405
Result	: Eye irritation

### **Amines, N-C12-14-alkyltrimethylenedi-:**

Remarks	: Causes eye burns.
---------	---------------------

### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Result	: Irreversible effects on the eye
--------	-----------------------------------

### **propan-2-ol:**

Result	: Eye irritation
--------	------------------

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

### **Components:**

#### **1-phenoxypropan-2-ol:**

Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Not a skin sensitizer.

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-  
aminium acetate and {[3-(C12-C16 (even  
numbered)alkylamino)propyl]amino}(imino)methanaminium  
acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16  
(even numbered)alkylamino](imino)methanaminium diacetate:

Remarks	: No data available
---------	---------------------

### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

Test Type	: Maximisation Test
Species	: Guinea pig
Result	: Did not cause sensitisation on laboratory animals.

### **ethanol:**

Test Type	: Maximisation Test
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Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Did not cause sensitisation on laboratory animals.

### Amines, N-C12-14-alkyltrimethylenedi-:

Remarks	: not applicable, corrosive substance. According Guidline OECD 402 a non- corrosive concentration has to be tested
---------	--

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Test Type	: Buehler Test
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Did not cause sensitisation on laboratory animals.
GLP	: yes

### propan-2-ol:

Test Type	: Buehler Test
Species	: Guinea pig
Result	: Did not cause sensitisation on laboratory animals.

### Germ cell mutagenicity

Not classified based on available information.

### Components:

#### 1-phenoxypropan-2-ol:

Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	: Test Type: Micronucleus test Species: Mouse Method: OECD Test Guideline 474 Result: negative

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[ammonio(imino)methyl]amino)propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Genotoxicity in vitro	: Test Type: Ames test Test system: Salmonella typhimurium Method: OECD Test Guideline 471 Result: Non mutagenic GLP: yes
Germ cell mutagenicity- As-	: Not mutagenic in Ames Test



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Assessment

### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Result: negative

### ethanol:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: Not mutagenic in Ames Test

Genotoxicity in vivo : Result: Non mutagenic

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

### Amines, N-C12-14-alkyltrimethylenedi-

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: Not mutagenic in Ames Test  
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test  
Species: Mouse (male and female)  
Application Route: Oral  
Result: negative

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)  
Test system: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: Not mutagenic in Ames Test

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Species: Mouse (male and female)  
Application Route: Oral  
Method: OECD Test Guideline 474  
GLP: yes

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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### **propan-2-ol:**

Genotoxicity in vitro : Test Type: Ames test  
Method: Mutagenicity (Escherichia coli - reverse mutation assay)  
Result: Non mutagenic

Genotoxicity in vivo : Species: Mouse  
Method: Mutagenicity (micronucleus test)  
Result: Non mutagenic

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **1-phenoxypropan-2-ol:**

Remarks : This information is not available.

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Carcinogenicity - Assessment : No data available

#### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

Remarks : This information is not available.

### **ethanol:**

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

#### **Amines, N-C12-14-alkyltrimethylenedi-:**

Remarks : This information is not available.

Carcinogenicity - Assessment : No data available

#### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

### **propan-2-ol:**

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

### Reproductive toxicity

Not classified based on available information.

### Components:

#### 1-phenoxypropan-2-ol:

Effects on fertility : Test Type: Two-generation study  
Species: Rat  
Application Route: Oral  
General Toxicity - Parent: NOAEL: 477.5 mg/kg bw/day  
Method: OECD Test Guideline 416  
Result: Animal testing did not show any effects on fertility.

Effects on foetal development : Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 180 mg/kg bw/day  
Developmental Toxicity: NOAEL: 180 mg/kg bw/day  
Method: OECD Test Guideline 414  
Result: No effects on fertility and early embryonic development were detected.

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[ammonio(imino)methyl]amino)propyl]-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Effects on foetal development : Test Type: Fertility/early embryonic development  
Species: Rat, female  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 15 mg/kg body weight  
Teratogenicity: NOAEL: 125 mg/kg body weight  
Developmental Toxicity: NOAEL: 45 mg/kg body weight  
Embryo-foetal toxicity: NOAEL: 45 mg/kg body weight  
Method: OECD Test Guideline 414  
GLP: yes

#### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega-hydroxy-, branched:

Effects on fertility : Remarks: Animal testing did not show any effects on fertility.  
Effects on foetal development : Remarks: No effects on fertility and early embryonic development were detected.

#### ethanol:

Effects on foetal development : Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 2,000 mg/kg body weight

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Reproductive toxicity - Assessment : Animal experiments showed mutagenic and teratogenic effects.

### Amines, N-C12-14-alkyltrimethylenedi-

Effects on foetal development : Test Type: Pre-natal  
Species: Rat  
Strain: wistar  
Application Route: Oral  
Dose: 1.25, 5.0, 20.0 milligram per kilogram  
Teratogenicity: NOAEL: 20 mg/kg body weight

Reproductive toxicity - Assessment : According to experience not expected

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Effects on fertility : Test Type: Two-generation study  
Species: Rat, male and female  
Application Route: Oral  
General Toxicity - Parent: NOAEL: 51 - 102 mg/kg body weight  
General Toxicity F1: NOAEL: 41 - 83 mg/kg body weight  
Fertility: NOAEL: 139 - 198 mg/kg body weight  
Method: OECD Test Guideline 416  
Result: Animal testing did not show any effects on fertility.  
GLP: yes

Effects on foetal development : Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 8.1 mg/kg body weight  
Developmental Toxicity: NOAEL: 81 mg/kg body weight  
Method: OECD Test Guideline 414  
GLP: yes  
Remarks: Animal testing did not show any effects on foetal development.

### propan-2-ol:

Effects on foetal development : Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 400 mg/kg body weight

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

### STOT - single exposure

Not classified based on available information.

### Components:

#### 1-phenoxypropan-2-ol:

Remarks : No data available

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C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

||Remarks : No data available

**Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

||Remarks : No data available

**ethanol:**

||Remarks : No data available

**Amines, N-C12-14-alkyltrimethylenedi-:**

||Remarks : not determined

**Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

||Remarks : No data available

**propan-2-ol:**

||Assessment : May cause drowsiness or dizziness.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Components:**

**1-phenoxypropan-2-ol:**

||Remarks : No data available

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

||Exposure routes : Ingestion  
||Assessment : May cause damage to organs through prolonged or repeated exposure.

**Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

||Remarks : No data available

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### **ethanol:**

Remarks : No data available

### **Amines, N-C12-14-alkyltrimethylenedi-:**

Exposure routes : Ingestion  
Target Organs : Gastrointestinal tract, Immune system  
Assessment : Causes damage to organs through prolonged or repeated exposure.

### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Remarks : No data available

### **propan-2-ol:**

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

### **Repeated dose toxicity**

#### **Components:**

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Species : Rat, male and female  
NOAEL : 30 mg/kg  
Application Route : Oral  
Exposure time : 14-days  
Method : OECD Test Guideline 407  
GLP : yes

### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched:**

Species : Rat  
NOAEL : 50 mg/kg  
Application Route : Oral  
Exposure time : 2 yr  
Target Organs : Heart, Liver, Kidney

### **ethanol:**

Species : Rat  
NOAEL : 1,730 mg/kg  
LOAEL : 3,160 mg/kg  
Application Route : Oral  
Exposure time : 90 d

### **Amines, N-C12-14-alkyltrimethylenedi-:**

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Species	: Rat, male and female
NOAEL	: 0.4 mg/l
Application Route	: Ingestion
Exposure time	: 90-day
Dose	: 0.1, 0.4, 1.5, 6
Method	: OECD Test Guideline 408
Target Organs	: Digestive organs

### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Species	: Rat, male
NOAEL	: 31 mg/kg
Application Route	: Oral
Exposure time	: 90-day
Method	: OECD Test Guideline 408
GLP	: yes

Species	: Rat
NOAEL	: 214 mg/kg
Application Route	: Oral
Exposure time	: 14-days
Method	: OECD Test Guideline 407

### **propan-2-ol:**

Remarks	: No data available
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### **Aspiration toxicity**

Not classified based on available information.

### **Further information**

#### **Product:**

Remarks	: No data is available on the product itself.
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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Product:**

Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.28 mg/l Exposure time: 48 h Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
---	--

#### **Components:**

##### **1-phenoxypropan-2-ol:**

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 280 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
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Toxicity to daphnia and other aquatic invertebrates	: LC50 (Daphnia magna (Water flea)): 370 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201  ErC10 (Desmodesmus subspicatus (green algae)): 55.5 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Toxicity to fish	: LC50 (Danio rerio (zebra fish)): 0.707 mg/l Exposure time: 96 h Analytical monitoring: yes Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.058 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	: ErC50 (Desmodesmus subspicatus (green algae)): 0.0197 mg/l Exposure time: 72 h Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes  NOEC (Desmodesmus subspicatus (green algae)): 0.00316 mg/l Exposure time: 72 h Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
M-Factor (Acute aquatic toxicity)	: 10
Toxicity to fish (Chronic toxicity)	: NOEC: 0.125 mg/l Exposure time: 9 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 212 GLP: yes



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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.025 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211  
GLP: yes

M-Factor (Chronic aquatic toxicity) : 1

### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega-hydroxy-, branched:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 2.5 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.5 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 2.5 mg/l  
Exposure time: 72 h  
  
EC10 (Desmodesmus subspicatus (green algae)): 0.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC: 1.73 mg/l  
Method: QSAR

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.36 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: QSAR

### **ethanol:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8,140 mg/l  
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5,000 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l  
Exposure time: 72 h

### **Amines, N-C12-14-alkyltrimethylenedi-**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 0.148 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna): 0.032 mg/l  
Test Type: Reproduction Test  
Method: OECD Test Guideline 211  
Remarks: 21 -days

Toxicity to algae/aquatic : EC50 (Pseudokirchneriella subcapitata (microalgae)): 0.0652

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plants	mg/l
	Exposure time: 72 h
	Test Type: static test
	Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 100
Toxicity to microorganisms	: EC50 : 68 mg/l
	Method: OECD 209
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.032 mg/l
	Exposure time: 21 d
	Species: Daphnia magna (Water flea)
	Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	: 1

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 0.85 mg/l
	Exposure time: 96 h
	Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna): 0.015 mg/l
	Exposure time: 48 h
Toxicity to algae/aquatic plants	: IC50 : 0.03 mg/l
	Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	: 10
Toxicity to fish (Chronic toxicity)	: NOEC: 0.032 mg/l
	Exposure time: 34 d
	Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.0042 mg/l
	Exposure time: 21 d
	Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	: 1

### propan-2-ol:

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l
	Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 10,000 mg/l
	Exposure time: 48 h
Toxicity to algae/aquatic plants	: EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
	Exposure time: 72 h

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Test Type: static test

EC50 (green algae): 1,800 mg/l  
Exposure time: 7 d

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: According to OECD criteria, the product is inherently biodegradable.  
The statement has been derived from the properties of the individual components.

#### Components:

##### **1-phenoxypropan-2-ol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 72 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-{[ammonio(imino)methyl]amino}propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate:

Biodegradability : Concentration: 5 mg/l  
Result: Biodegradable  
Biodegradation: 64 %  
Exposure time: 28 d  
Method: OECD 301B/ ISO 9439/ EEC 84/449 C5  
GLP: no

##### **Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-, branched:**

Biodegradability : Test Type: aerobic  
Inoculum: activated sludge  
Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

##### **ethanol:**

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable.  
Biodegradation: > 70 %  
Exposure time: 5 d  
Method: OECD 301D / EEC 84/449 C6

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### Amines, N-C12-14-alkyltrimethylenedi-:

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 66 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Biodegradability : Concentration: 5 mg/l  
Result: Readily biodegradable.  
Biodegradation: 95.5 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

### propan-2-ol:

Biodegradability : Result: Readily biodegradable.

## 12.3 Bioaccumulative potential

### Components:

#### 1-phenoxypropan-2-ol:

Partition coefficient: n- : log Pow: 1.41 (24.1 °C)  
octanol/water Method: OECD Test Guideline 107

C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-  
aminium acetate and {[3-(C12-C16 (even  
numbered)alkylamino)propyl]amino}(imino)methanaminium  
acetate and [(3-[[ammonio(imino)methyl]amino)propyl]-C12-C16  
(even numbered)alkylamino](imino)methanaminium diacetate:

Bioaccumulation : Remarks: No data available

### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega-hydroxy-, branched:

Bioaccumulation : Remarks: None reasonably foreseeable.

Partition coefficient: n- : Remarks: Not applicable  
octanol/water

### ethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n- : log Pow: -0.14  
octanol/water Method: Calculated value

### Amines, N-C12-14-alkyltrimethylenedi-:

Bioaccumulation : Bioconcentration factor (BCF): 3.2  
Remarks: Bioaccumulation is unlikely.

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Partition coefficient: n-  
octanol/water : log Pow: -0.6 (24.7 °C)

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Bioaccumulation : Exposure time: 35 d  
Concentration: 0.076 mg/l  
Bioconcentration factor (BCF): 79  
GLP: yes  
Remarks: Does not bioaccumulate.

Partition coefficient: n-  
octanol/water : log Pow: 2.75 (20 °C)

### propan-2-ol:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-  
octanol/water : log Pow: 0.05 (20 °C)  
Method: OECD Test Guideline 107

## 12.4 Mobility in soil

### Components:

#### Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega-hydroxy-, branched:

Mobility : Remarks: No data available

#### ethanol:

Mobility : Remarks: No data available

#### Amines, N-C12-14-alkyltrimethylenedi-:

Mobility : Medium: Soil  
Remarks: Mobile in soils

Distribution among environ-  
mental compartments : Medium: Soil  
Koc: 10400  
Method: OECD Test Guideline 106

### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Mobility : Remarks: No data available

### propan-2-ol:

Mobility : Remarks: Mobile in soils

## 12.5 Results of PBT and vPvB assessment

### Product:

Assessment : This substance/mixture contains no components considered

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to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

#### Product:

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : No data is available on the product itself.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### 14.1 UN number

ADR : UN 1903

IMDG : UN 1903

IATA : UN 1903

### 14.2 UN proper shipping name

ADR : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.  
(Cocosalkylpropylendiaminbiguanidiniumdiacetat, Alkyl(C12-16)dimethylbenzylammoniumchloride)

IMDG : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.  
(Cocosalkylpropylendiaminbiguanidiniumdiacetat, Alkyl(C12-16)dimethylbenzylammoniumchloride)

IATA : Disinfectant, liquid, corrosive, n.o.s.  
(Cocosalkylpropylendiaminbiguanidiniumdiacetat, Alkyl(C12-16)dimethylbenzylammoniumchloride)

### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	: 8	

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**IMDG** : 8

**IATA** : 8

### 14.4 Packing group

#### ADR

Packing group : III  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8  
Tunnel restriction code : (E)

#### IMDG

Packing group : III  
Labels : 8  
EmS Code : F-A, S-B

#### IATA (Cargo)

Packing instruction (cargo aircraft) : 856  
Packing instruction (LQ) : Y841  
Packing group : III  
Labels : Corrosive

#### IATA (Passenger)

Packing instruction (passenger aircraft) : 852  
Packing instruction (LQ) : Y841  
Packing group : III  
Labels : Corrosive

### 14.5 Environmental hazards

#### ADR

Environmentally hazardous : yes

#### IMDG

Marine pollutant : yes

### 14.6 Special precautions for user

Remarks : Not classified as supporting combustion according to the transport regulations.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant EU provisions transposed through retained EU law

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UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
Volatile organic compounds	:	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 11.81 %
according to Detergents Regulation EC 648/2004	:	5 - < 15%: Non-ionic surfactants < 5%: Cationic surfactants Other constituents: Disinfectants

### **Other regulations:**

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

### **The components of this product are reported in the following inventories:**

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.  C12-C16 (even numbered) alkyl-1,4,5,6-tetrahydropyrimidin-2-aminium acetate and {[3-(C12-C16 (even numbered)alkylamino)propyl]amino}(imino)methanaminium acetate and [(3-[[ammonio(imino)methyl]amino]propyl)-C12-C16 (even numbered)alkylamino](imino)methanaminium diacetate Amines, N-C12-14-alkyltrimethylenedi-
ENCS	:	Not in compliance with the inventory



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ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

## **15.2 Chemical safety assessment**

### **SECTION 16: Other informationFull text of H-Statements**

H225	: Highly flammable liquid and vapour.
H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H312	: Harmful in contact with skin.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.
H372	: Causes damage to organs through prolonged or repeated exposure if swallowed.
H373	: May cause damage to organs through prolonged or repeated exposure if swallowed.
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.

### **Full text of other abbreviations**

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Flam. Liq.	: Flammable liquids
Skin Corr.	: Skin corrosion
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	: Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergen-

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cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### **Further information**

#### **Classification of the mixture:**

Acute Tox. 4	H302
Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

#### **Classification procedure:**

Calculation method
Calculation method
Calculation method
Calculation method
Based on product data or assessment
Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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