Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Trade name :	ID 215 Enzymatic Instrument Cleaner		
Revision :	02.01.2018	**Version :**	1.0.1 (1.0.0)
Print date :	02.01.2018		

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

1.1 Product identifier
ID 215 Enzymatic Instrument Cleaner

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
ID 215 is a concentrate for manual, enzymatic cleaning of general and surgical instruments.

Product Categories [PC]

PC35 - Washing and cleaning products (including solvent based products)

Uses advised against
None, if handled according to order.

Remark
The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet
Supplier (manufacturer/importer/only representative/downstream user/distributor)
orochemie GmbH + Co. KG

Street : Max-Planck-Straße 27

Postal code/city : 70806 Kornwestheim

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DÜRR DENTAL [Products] UK Ltd., 14 Linnell Way - Telford Way Industrial Estate, Kettering Northants NN16 8PS, United Kingdom
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1.4 Emergency telephone number
INT: +49 6132 84463 (24 h/7 d)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]
Aquatic Acute 1 ; H400 - Hazardous to the aquatic environment : Acute 1 ; Very toxic to aquatic life.

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Corr. 1B ; H314 - Skin corrosion/irritation : Category 1B ; Causes severe skin burns and eye damage.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.

Classification procedure

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP].

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms



Health hazard (GHS08) · Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

2,2` -OXYBISETHANOL ; CAS No. : 111-46-6
ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5
DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5

Hazard statements

H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to hazardous or special waste collection point.

Special rules for supplemental label elements for certain mixtures

EUH208	Contains POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE. May produce an allergic reaction.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description

ID 215 contains quaternary ammonium compounds, guanidines, non-ionic surfactants, diethylene glycol, enzymes and excipients in aqueous solution.

Hazardous ingredients

2,2` -OXYBISETHANOL ; REACH registration No. : 01-2119457857-21 ; EC No. : 203-872-2; CAS No. : 111-46-6

Weight fraction : ≥ 30 - < 35 %
Classification 1272/2008 [CLP] : STOT RE 2 ; H373 Acute Tox. 4 ; H302

ISOTRIDECANOL ETHOXYLATE ; REACH registration No. : 02-2119552461-55 ; EC No. : 931-138-8; CAS No. : 69011-36-5

Weight fraction : ≥ 10 - < 15 %
Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Acute Tox. 4 ; H302

DIDECYLDIMETHYLAMMONIUM CHLORIDE ; REACH registration No. : - ; EC No. : 230-525-2; CAS No. : 7173-51-5

Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Acute Tox. 3 ; H301 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

PROPAN-2-OL ; REACH registration No. : 01-2119457558-25 ; EC No. : 200-661-7; CAS No. : 67-63-0

Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; REACH registration No. : - ; CAS No. : 1802181-67-4
Weight fraction : ≥ 0,1 - < 0,5 %
Classification 1272/2008 [CLP] : Acute Tox. 2 ; H330 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Sens. 1B ;H317 STOT SE 3 ; H335 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Additional information
Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
When in doubt or if symptoms are observed, get medical advice.

Following inhalation
No special measures are necessary.

In case of skin contact
Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice.

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion
No special measures are necessary. Never give anything by mouth to an unconscious person or a person with cramps.

4.2 Most important symptoms and effects, both acute and delayed
Causes severe skin burns and eye damage. Harmful.

4.3 Indication of any immediate medical attention and special treatment needed
None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2) Extinguishing powder Water spray Water mist The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
None known.

Hazardous combustion products
None known.

5.3 Advice for firefighters
Adapt protective equipment to surrounding fire.

Special protective equipment for firefighters
Adapt protective equipment to surrounding fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protection equipment. See protective measures under point 7 and 8.

For non-emergency personnel

Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Personal protection equipment

See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For cleaning up

No special measures are necessary.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep/Store only in original container. Please note safety instructions and directions for use on the drum.

Protective measures

Measures to prevent fire

Usual measures for fire prevention. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 °C.

Hints on joint storage

Store the foodstuffs separately.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

2,2` -OXYBISETHANOL ; CAS No. : 111-46-6

Limit value type (country of origin) :	TLV/TWA (GB)
Limit value :	23 ppm / 101 mg/m^3

PROPAN-2-OL ; CAS No. : 67-63-0

Limit value type (country of origin) :	TLV/STEL (GB)
Limit value :	500 ppm / 1250 mg/m^3
Limit value type (country of origin) :	TLV/TWA (GB)
Limit value :	400 ppm / 999 mg/m^3

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

DNEL/DMEL

Limit value type :	DNEL Consumer (local) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	12 mg/m^3
Limit value type :	DNEL Consumer (local) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Inhalation

Exposure frequency :	Short-term (acute)
Limit value :	12 mg/m³
Limit value type :	DNEL Consumer (systemic) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	53 mg/kg
Limit value type :	DNEL worker (local) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	60 mg/m³
Limit value type :	DNEL worker (systemic) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	106 mg/kg
Limit value type :	DNEL worker (systemic) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	60 mg/m³
Limit value type :	DNEL Consumer (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	319 mg/kg
Safety factor :	24 h
Limit value type :	DNEL Consumer (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	89 mg/m³
Limit value type :	DNEL Consumer (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	26 mg/kg
Safety factor :	24 h
Limit value type :	DNEL worker (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	888 mg/kg
Safety factor :	24 h
Limit value type :	DNEL worker (systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	500 mg/m³

PNEC

Limit value type :	PNEC aquatic, freshwater (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Limit value :	10 mg/l
Limit value type :	PNEC aquatic, marine water (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Limit value :	1 mg/l
Limit value type :	PNEC (Industrial) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Soil
Limit value :	1,53 mg/kg
Limit value type :	PNEC sediment, freshwater (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Limit value :	20,9 mg/kg
Limit value type :	PNEC sediment, marine water (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Limit value :	2,09 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Limit value :	199,5 mg/l

Limit value type :	PNEC aquatic, freshwater (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	140,9 mg/l
Limit value type :	PNEC aquatic, marine water (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	140,9 mg/l
Limit value type :	PNEC (Industrial) (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Soil
Limit value :	28 mg/kg
Limit value type :	PNEC sediment, freshwater (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	552 mg/kg
Limit value type :	PNEC sediment, marine water (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	552 mg/kg
Limit value type :	PNEC Secondary Poisoning (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	160 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) (PROPAN-2-OL ; CAS No. : 67-63-0)
Limit value :	2251 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Eye glasses with side protection DIN EN 166

Skin protection

Hand protection

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.
Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Body protection

Body protection: not required.

Respiratory protection

No special measures are necessary.

General health and safety measures

Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink, smoke, sniff.

Occupational exposure controls

Technical measures to prevent exposure

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : blue

Odour : characteristic

Safety relevant basis data

Melting point/melting range :	(1013 hPa)		not determined	
Initial boiling point and boiling range :	(1013 hPa)	approx.	100	°C
Decomposition temperature :	(1013 hPa)		not determined	
Flash point :			not applicable	
Ignition temperature :			not applicable	
Lower explosion limit :			not applicable	

Upper explosion limit :			not applicable		
Vapour pressure :	(50 °C)		not determined		
Density :	(20 °C)		1 - 1,1	g/cm³	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		100	Wt %	
pH :			5 - 7		
pH :	(20 °C / 20 g/l)		6,5 – 8,5		
log P O/W :			not determined		
Flow time :	(20 °C)	<	20	s	DIN-cup 4 mm
Odour threshold :			not determined		
Maximum VOC content (EC) :			33,6	Wt %	

Oxidising liquids : Not applicable.
Explosive properties : Not applicable.
Corrosive to metals : Not corrosive to metals.

9.2 Other information
None

SECTION 10: Stability and reactivity

10.1 Reactivity
None, if handled according to order.

10.2 Chemical stability
Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions
None, if handled according to order.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute effects
Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	822 mg/kg
Parameter :	LD50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Oral
Species :	Practical experience/human evidence
Effective dose :	1120 mg/kg
Parameter :	LD50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Oral
Species :	Rat
Effective dose :	12565 mg/kg
Parameter :	LD50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Oral
Species :	Rabbit
Effective dose :	4400 mg/kg
Parameter :	LD50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)

Exposure route :	Oral
Species :	Rat
Effective dose :	300 - 2000 mg/kg
Parameter :	LD50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	238 mg/kg
Method :	OECD 401
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Oral
Species :	Rat
Effective dose :	5280 mg/kg
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Oral
Species :	Rat
Effective dose :	5840 mg/kg
Method :	OECD 401
Parameter :	LD50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 423
Parameter :	ATE (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Oral
Effective dose :	500 mg/kg
Parameter :	ATE (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Exposure route :	Oral
Effective dose :	500 mg/kg
Parameter :	ATE (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Exposure route :	Oral
Effective dose :	200 mg/kg
Parameter :	ATE (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Exposure route :	Oral
Effective dose :	500 mg/kg

Practical experience/human evidence

Causes severe skin burns and eye damage.

Acute dermal toxicity

Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	not relevant
Parameter :	LD50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	13300 mg/kg
Parameter :	LD50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	3342 mg/kg
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)

Exposure route :	Dermal
Species :	Rabbit
Effective dose :	12800 mg/kg
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	13900 mg/kg
Method :	OECD 402
Parameter :	LD50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 402

Acute inhalation toxicity

Parameter :	ATEmix calculated
Exposure route :	Inhalative (vapour)
Effective dose :	125 mg/l
Parameter :	LC0 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 4,6 mg/l
Exposure time :	4 h
Parameter :	LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 25 mg/l
Exposure time :	6 h
Method :	OECD 403
Parameter :	LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	72,6 mg/l
Exposure time :	4 h
Parameter :	LC50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	1,61 mg/l
Method :	OECD 403

Irritant and corrosive effects
Causes severe skin burns and eye damage.

Sensitisation
May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Based on available data, the classification criteria are not met.

11.5 Additional information
The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP].

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity

There are no data available on the preparation itself.

Acute (short-term) fish toxicity

Parameter :	LC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	75200 mg/l
Exposure time :	96 h
Parameter :	LC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Carassius auratus (goldfish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 5000 mg/l
Exposure time :	24 h
Parameter :	LC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Gambusia affinis (Mosquito fish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 10000 mg/l
Exposure time :	96 h
Parameter :	LC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1000 mg/l
Exposure time :	96 h
Parameter :	LC50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	1 - 10 mg/l
Exposure time :	96 h
Parameter :	LC50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Species :	Cyprinus carpio (Common Carp)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	0,19 mg/l
Exposure time :	96 h
Parameter :	LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	9640 mg/l
Exposure time :	96 h
Parameter :	LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	48 h
Parameter :	LC50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)

Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	0,321 mg/l
Exposure time :	96 h
Method :	OECD 203

Chronic (long-term) fish toxicity

Parameter :	NOEC (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Species :	Brachydanio rerio (zebra-fish)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	0,032 mg/l
Exposure time :	816 h
Method :	OECD 210
Parameter :	NOEC (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	0,00498 mg/l
Exposure time :	672 h
Method :	OECD 210

Acute (short-term) daphnia toxicity

Parameter :	EC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 10000 mg/l
Exposure time :	24 h
Parameter :	EC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Daphnia magna (Big water flea)
Effective dose :	48900 mg/l
Exposure time :	48 h
Parameter :	EC50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Species :	Daphnia
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	1 - 10 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EC50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	0,062 mg/l
Exposure time :	48 h
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	13299 mg/l
Exposure time :	48 h
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	9714 mg/l
Exposure time :	24 h
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 100 mg/l
Exposure time :	48 h

Parameter :	EC50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	0,156 mg/l
Exposure time :	48 h
Method :	OECD 202

Chronic (long-term) daphnia toxicity

Parameter :	NOEC (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	0,01 mg/l
Exposure time :	504 h
Method :	OECD 211
Parameter :	NOEC (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	0,00544 mg/l
Exposure time :	504 h
Method :	OECD 211

Acute (short-term) algae toxicity

Parameter :	EC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species :	Selenastrum capricornutum
Evaluation parameter :	Inhibition of growth rate
Effective dose :	> 100 mg/l
Parameter :	EC50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Species :	Desmodesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	1 - 10 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	ErC50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Inhibition of growth rate
Effective dose :	0,026 mg/l
Exposure time :	96 h
Method :	OECD 201
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 1000 mg/l
Exposure time :	72 h
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Scenedesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 100 mg/l
Exposure time :	72 h
Parameter :	EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Algae
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	1800 mg/l
Exposure time :	168 h
Parameter :	ErC50 (POLY(HEXAMETHYLENE BIGUANIDE)HYDROCHLORIDE ; CAS No. : 1802181-67-4)
Species :	Pseudokirchneriella subcapitata

Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 0,0206 mg/l
Exposure time : 72 h
Method : OECD 201

Chronic (long-term) algae toxicity

Parameter : NOEC (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species : Scenedesmus quadricauda
Evaluation parameter : Chronic (long-term) algae toxicity
Effective dose : 2700 mg/l
Exposure time : 192 h

Bacteria toxicity

Parameter : EC50 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Evaluation parameter : Bacteria toxicity
Effective dose : > 1000 mg/l
Exposure time : 3 h
Parameter : EC10 (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Species : Pseudomonas putida
Evaluation parameter : Bacteria toxicity
Effective dose : 8000 mg/l
Exposure time : 16 h
Parameter : EC50 (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Species : Bacteria toxicity
Effective dose : 140 mg/l
Parameter : EC50 (DIDECYLDIMETHYLAMMONIUM CHLORIDE ; CAS No. : 7173-51-5)
Evaluation parameter : Bacteria toxicity
Effective dose : 11 mg/l
Exposure time : 3 h
Method : OECD 209
Parameter : EC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Evaluation parameter : Bacteria toxicity
Effective dose : > 100 mg/l
Parameter : EC10 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species : Pseudomonas putida
Evaluation parameter : Bacteria toxicity
Effective dose : 5175 mg/l
Exposure time : 18 h

Effects in sewage plants

In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

12.2 Persistence and degradability

Abiotic degradation

No data available.

Biodegradation

Parameter : DOC reduction (2,2` -OXYBISETHANOL ; CAS No. : 111-46-6)
Inoculum : Degree of elimination
Evaluation parameter : Biodegradation
Effective dose : > 70 %
Exposure time : 672 h
Parameter : BOD (% of COD) (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)
Inoculum : Biodegradation
Evaluation parameter : Aerobic
Effective dose : > 60 %
Exposure time : 672 h
Method : OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C
Parameter : BOD (% of COD) (ISOTRIDECANOL ETHOXYLATE ; CAS No. : 69011-36-5)

Inoculum :	Biodegradation
Evaluation parameter :	Anaerobic
Effective dose :	> 60 %
Exposure time :	1440 h

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
Known or predicted distribution to environmental compartments
No data available
Adsorption/Desorption
12.5 Results of PBT and vPvB assessment
No information available.
12.6 Other adverse effects
No information available.
12.7 Additional ecotoxicological information
Prevent from flowing into surface water/ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product/Packaging disposal
Waste codes/waste designations according to EWC/AVV

Waste code product

Concentrate/larger quantities: 18 01 06*.

Waste treatment options

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number
UN 1760
14.2 UN proper shipping name
Land transport (ADR/RID)

CORROSIVE LIQUID, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE)

Sea transport (IMDG)

CORROSIVE LIQUID, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE)

Air transport (ICAO-TI / IATA-DGR)

CORROSIVE LIQUID, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE)
14.3 Transport hazard class(es)
Land transport (ADR/RID)

Class(es) :	8
Classification code :	C9
Hazard identification number (Kemler No.) :	80
Tunnel restriction code :	E

Special provisions : LQ 1 l · E 2
Hazard label(s) : 8 / N

Sea transport (IMDG)
Class(es) : 8
EmS-No. : F-A / S-B
Special provisions : LQ 1 l · E 2
Hazard label(s) : 8 / N

Air transport (ICAO-TI / IATA-DGR)
Class(es) : 8
Special provisions : E 2
Hazard label(s) : 8

14.4 Packing group
II

14.5 Environmental hazards
Land transport (ADR/RID) : Yes
Sea transport (IMDG) : Yes (P)
Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Restrictions of occupation
According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

15.2 Chemical safety assessment
For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes
-

16.2 Abbreviations and acronyms
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimates
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CMR = Carcinogen, Mutagen or Reproductive toxicant
CO_2 = Carbon dioxide
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = European Commission
EC50 = Half maximal effective concentration
EN = European Standard (Norm)
EU = European Union
EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
H statement = GHS Hazard statement
IATA = International Air Transport Association ICAO-TI = International Civil Aviation Organization-Technical Instructions
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
LogPow = Logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOEC/NOEL = No observed effect concentration/level
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RMM = Risk Management Measure
RRN = REACH Registration Number
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
SVHC = Substances of Very High Concern
TLV/STEL = Threshold limit value/short-term exposure limit
TLV/TWA = Threshold limit value/time weighted average
UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6 Training advice

None

16.7 Additional information

Notice the directions for use on the label.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.