Safety Data Sheet
according to GHS

Trade name :	FD 312 Surface disinfection		
Revision :	11.07.2019	**Version :**	1.0.0
Print date :	30.07.2019		

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

1.1 Product identifier

FD 312 Surface disinfection

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

Relevant identified uses

FD 312 is an aldehyde-free preparation for the disinfection and cleaning of all washable surfaces and objects (practice inventory, patient chairs, medical equipment, etc.).

Product Categories [PC]

PC8 - PC 8 - Biocidal product (e.g. Disinfectants)

PC0 - Other

Disinfectants

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

Telephone : +49 7154 1308-0

Telefax : +49 7154 1308-40

Information contact : DÜRR DENTAL SE, Höpfigheimer Str. 17, 74321 Bietigheim-Bissingen, Germany
Tel: +49 7142 705-0, Fax: +49 7142 705-500, info@duerrdental.comin Australia:
DÜRR DENTAL SE, PO Box 2067, Woonona East New South Wales 2517, Australia,
Louis Manera +61 (0)412 95 95 25
Importer/Distributor:
Ivoclar Vivadent Ltd, PO Box 303011, North Harbour, Auckland, 0751.
Phone +64 9 914 9999 Fax+64 9 914 9990

1.4 Emergency telephone number

NZ: National Poison Centre (New Zealand) 0800 764 766 Poisons Hotline (24 hours/7days)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to GHS

Aquatic Acute 1 ; H400 - Hazardous to the aquatic environment : Acute 1 ; Very toxic to aquatic life.

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

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

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Classification procedure

The classification was carried out according to the calculation method of GHS as well as in-house investigations.

2.2 Label elements

Labelling according to Regulation GHS

Hazard pictograms


Corrosion (GHS05) · Environment (GHS09)

Signal word

Danger

Hazard components for labelling

BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5

Hazard statements

H318	Causes serious eye damage.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P280	Wear protective gloves and eye/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P353	Rinse skin with water [or 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.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description

FD 312 contains quaternary ammonium compounds, non-ionic and amphoteric surfactants, alkaline cleaning components, complexing agents, hexyl cinnamal, linalool, butyl phenyl methyl propional, fragrances and auxiliary agents in aqueous solution.

Hazardous ingredients

BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; REACH registration No. : 01-2119965180-41 ; EC No. : 269-919-4; CAS No. : 68391-01-5

Weight fraction :	≥ 5 - < 10 %
Classification:	Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 5 ; H313 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

FATTY ALCOHOL POLYGLYCOL ETHER ; REACH registration No. : - ; CAS No. : 26183-52-8

Weight fraction :	≥ 3 - < 5 %
Classification :	Eye Dam. 1 ; H318 Acute Tox. 4 ; H302

SODIUM ETHYLENEDIAMINETETRAACETATE ; REACH registration No. : 01-2119486762-27 ; EC No. : 200-573-9; CAS No. : 64-02-8

Weight fraction :	≥ 1 - < 3 %
Classification:	STOT RE 2 ; H373 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H332

TRISODIUM NITRILOTRIACETATE ; REACH registration No. : 01-2119519239-36 ; EC No. : 225-768-6; CAS No. : 5064-31-3

Weight fraction :	≥ 1 - < 3 %
Classification :	Carc. 2 ; H351 Acute Tox. 4 ; H302 Eye Irrit. 2 ; H319

TETRAPOTASSIUM DIPHOSPHATE ; REACH registration No. : 01-2119489369-18 ; EC No. : 230-785-7; CAS No. : 7320-34-5

Weight fraction :	≥ 1 - < 3 %
Classification :	Eye Irrit. 2 ; H319

FATTY ALCOHOL POLYGLYCOL ETHER ; REACH registration No. : - ; CAS No. : 97043-91-9

Weight fraction : ≥ 1 - < 3 %
Classification: Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Chronic 3 ; H412

COCAMIDOPRPOYLAMINE OXIDE ; REACH registration No. : 01-2119978229-22 ; EC No. : 939-581-9; CAS No. : 1471314-81-4
Weight fraction : ≥ 1 - < 2,5 %
Classification : Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Aquatic Acute 1 ; H400 Aquatic Chronic 3 ; H412

HEXYL CINNAMAL ; REACH registration No. : 01-2119533092-50 ; EC No. : 202-983-3; CAS No. : 101-86-0
Weight fraction : < 0,05 %
Classification: Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 2 ; H411

LINALOOL ; REACH registration No. : 01-2119474016-42 ; EC No. : 201-134-4; CAS No. : 78-70-6
Weight fraction : < 0,05 %
Classification: Skin Irrit. 2 ; H315 Skin Sens. 1B ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

BUTYLPHENYL METHYLPROPIONAL ; REACH registration No. : 01-2119485965-18 ; EC No. : 201-289-8; CAS No. : 80-54-6
Weight fraction : < 0,05 %
Classification: Repr. 2 ; H361f Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

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
Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation
Provide fresh air. In case of respiratory tract irritation, consult a physician.

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
If swallowed, immediately drink: Water Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed
Causes skin irritation. Causes serious eye damage.

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
Full 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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Other information

Treat the recovered material as prescribed in the section on waste disposal.

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. Handle and open container with care. Provide adequate ventilation. Do not breathe vapour/aerosol.

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

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

DNEL/DMEL

Limit value type :	DNEL Consumer (local) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	1,5 mg/m³
Limit value type :	DNEL Consumer (local) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	1,5 mg/m³
Limit value type :	DNEL Consumer (systemic) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	1,5 mg/m³
Limit value type :	DNEL Consumer (systemic) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	1,5 mg/m³
Limit value type :	DNEL Consumer (systemic) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	25 mg/kg
Safety factor :	24 h
Limit value type :	DNEL worker (local) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	2,5 mg/m³
Limit value type :	DNEL worker (local) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	2,5 mg/m³
Limit value type :	DNEL worker (systemic) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	2,5 mg/m³
Limit value type :	DNEL worker (systemic) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	2,5 mg/m³
Limit value type :	DNEL Consumer (local) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	1,75 mg/m³
Limit value type :	DNEL Consumer (systemic) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	1,75 mg/m³
Limit value type :	DNEL Consumer (systemic) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	0,5 mg/kg

Safety factor :	24 h
Limit value type :	DNEL worker (local) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	5,25 mg/m³
Limit value type :	DNEL worker (local) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	3,5 mg/m³
Limit value type :	DNEL worker (systemic) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	5,25 mg/m³
Limit value type :	DNEL worker (systemic) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	3,5 mg/m³
Limit value type :	DNEL Consumer (systemic) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	0,68 mg/l
Limit value type :	DNEL Consumer (systemic) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	> 70 mg/kg
Safety factor :	24 h
Limit value type :	DNEL Consumer (systemic) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	10,87 mg/m³
Limit value type :	DNEL worker (systemic) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	2,79 mg/m³
Limit value type :	DNEL worker (systemic) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	44,08 mg/m³
Limit value type :	DNEL/DMEL (Consumer) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	0,87 mg/m³
Limit value type :	DNEL/DMEL (Consumer) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	2,5 mg/kg
Limit value type :	DNEL/DMEL (Consumer) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	0,05 mg/kg
Limit value type :	DNEL/DMEL (Worker) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	3,52 mg/m³
Limit value type :	DNEL/DMEL (Worker) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Exposure route :	Dermal

Exposure frequency :	Long-term
Limit value :	5 mg/kg

PNEC

Limit value type :	PNEC (Aquatic, freshwater) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Limit value :	2,2 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Limit value :	1,2 mg/l
Limit value type :	PNEC (Aquatic, marine water) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Limit value :	0,22 mg/l
Limit value type :	PNEC soil, freshwater (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Limit value :	0,72 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Limit value :	43 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Water (Including sewage plant)
Limit value :	0,93 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Limit value :	0,915 mg/l
Limit value type :	PNEC (Aquatic, marine water) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Water (Including sewage plant)
Limit value :	0,093 mg/l
Limit value type :	PNEC (Sediment, freshwater) (TRISODIUM NITRILOTRIACETATE; CAS No. : 5064-31-3)
Exposure route :	Soil
Limit value :	3,64 mg/kg
Limit value type :	PNEC (Sediment, marine water) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Soil
Limit value :	0,364 mg/kg
Limit value type :	PNEC soil, freshwater (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Soil
Limit value :	0,182 mg/kg
Limit value type :	PNEC (Secondary poisoning) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Limit value :	0,2 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Water (Including sewage plant)
Limit value :	540 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Limit value :	0,05 mg/l
Limit value type :	PNEC (Aquatic, intermittent release) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Limit value :	0,5 mg/l
Limit value type :	PNEC (Aquatic, marine water) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Limit value :	0,005 mg/l
Limit value type :	PNEC (Sewage treatment plant) (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Limit value :	50 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Limit value :	0,0303 mg/l

Limit value type :	PNEC (Aquatic, marine water) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Limit value :	0,00303 mg/l
Limit value type :	PNEC (Sediment, freshwater) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Limit value :	0,214 mg/kg
Limit value type :	PNEC (Sediment, marine water) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Limit value :	0,0214 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Limit value :	9,7 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Eye glasses with side protection DIN EN 166
Use tightly fitting safety glasses as per Australian Standard AS 1336 and AS/NZS 1337. Safety glasses with side shields

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. Wear impervious rubber gloves (AS2161).

Body protection

Body protection: not required.

Respiratory protection

Usually no personal respirative protection necessary.

General health and safety measures

Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. 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 : green

Odour : aromatic

Safety relevant basis data

Melting point/melting range :	(1013 hPa)		No data available	
Initial boiling point and boiling range :	(1013 hPa)	approx.	100	°C
Decomposition temperature :	(1013 hPa)		No data available	
Flash point :			not applicable	
Ignition temperature :			not applicable	
Lower explosion limit :			not applicable	
Upper explosion limit :			not applicable	

Vapour pressure :	(50 °C)		No data available		
Density :	(20 °C)		1,03 - 1,07	g/cm³	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		100	Wt %	
pH value :			12,3 - 13,3		
pH value :	(20 °C / 20 g/l)		9 - 10		
log P O/W :			not applicable		
Flow time :	(20 °C)	<	12	s	DIN-cup 4 mm
Odour threshold :			No data available		
Maximum VOC content (EC) :			0,2	Wt %	
Oxidising liquids :	Not applicable.				
Explosive properties :	Not applicable.				
Corrosive to metals :	Not applicable.				

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). Reactions with acids: development of heat.

10.3 Possibility of hazardous reactions

Reactions with acids possible

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Acid

10.6 Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	LD50
Exposure route :	Oral
Species :	Rat
Effective dose :	approx. 5900 mg/kg
Method :	OECD 401
Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	3918 mg/kg
Parameter :	ATE (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5)
Exposure route :	Oral
Effective dose :	500 mg/kg
Parameter :	ATE (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route :	Oral
Effective dose :	500 mg/kg
Parameter :	ATE (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route :	Oral
Effective dose :	500 mg/kg

Parameter : ATE (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 97043-91-9)
Exposure route : Oral
Effective dose : 500 mg/kg
Parameter : ATE (BUTYLPHENYL METHYLPROPIONAL ; CAS No. : 80-54-6)
Exposure route : Oral
Effective dose : 500 mg/kg

Practical experience/human evidence

Causes serious eye damage. Causes skin irritation.

Acute dermal toxicity

Parameter : LD50
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Method : OECD 402
Parameter : ATEmix calculated
Exposure route : Dermal
Effective dose : not relevant

Acute inhalation toxicity

Parameter : ATEmix calculated
Exposure route : Inhalation (vapour)
Effective dose : 416,7 mg/l
Parameter : LC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Exposure route : Inhalation
Species : Rat
Effective dose : 30 mg/l
Exposure time : 6 h
Parameter : LC50 (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route : Inhalation
Species : Rat
Effective dose : > 5 mg/l
Exposure time : 4 h
Parameter : LC50 (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Exposure route : Inhalation
Species : Rat
Effective dose : > 4,25 mg/l
Exposure time : 4 h
Method : OECD 403
Parameter : LC50 (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Exposure route : Inhalation
Species : Rat
Effective dose : > 1,1 mg/l
Method : OECD 403

Irritant and corrosive effects

In vitro skin corrosion: irritant. Method : Human Skin Model (HSM) test Causes serious eye damage. Method : OECD 437.

Sensitisation

Guinea-pig: non-sensitizing. Method : OECD 406.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No information available.

11.5 Additional information

The classification was carried out according to the calculation method of GHS as well as in-house investigations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	0,28 mg/l
Exposure time :	96 h
Parameter :	LC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 26183-52-8)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	6 - 12 mg/l
Exposure time :	96 h
Parameter :	LC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 26183-52-8)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	4,47 - 5,26 mg/l
Exposure time :	672 h
Parameter :	LC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 26183-52-8)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	10 - 100 mg/l
Exposure time :	96 h
Parameter :	LC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Lepomis macrochirus (Bluegill)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	951 mg/l
Exposure time :	96 h
Parameter :	LC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	2040 mg/l
Exposure time :	96 h
Parameter :	LC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Lepomis macrochirus (Bluegill)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 97043-91-9)
Species :	Brachydanio rerio (zebra-fish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1 mg/l
Exposure time :	96 h
Parameter :	LC50 (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)

Species :	Brachydanio rerio (zebra-fish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	5,9 mg/l
Parameter :	LC50 (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	0,68 mg/l
Exposure time :	96 h
Method :	OECD 203

Chronic (long-term) fish toxicity

Parameter :	NOEC (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	0,032 mg/l
Exposure time :	816 h
Parameter :	NOEC (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Brachydanio rerio (zebra-fish)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	>= 36,9 mg/l
Exposure time :	840 h
Method :	OECD 210
Parameter :	NOEC (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	> 54 mg/l
Exposure time :	5376 h
Parameter :	NOEC (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	100 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	NOEC (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	0,42 mg/l
Exposure time :	7248 h

Acute (short-term) daphnia toxicity

Parameter :	Acute (short-term) daphnia toxicity
Species :	Daphnia magna (Big water flea)
Effective dose :	0,589 mg/l
Exposure time :	24 h
Method :	OECD 202
Parameter :	Acute (short-term) daphnia toxicity
Species :	Daphnia magna (Big water flea)
Effective dose :	0,26 mg/l
Exposure time :	48 h
Method :	OECD 202

Chronic (long-term) daphnia toxicity

Parameter :	NOEC
Species :	Daphnia magna (Big water flea)
Effective dose :	0,125 mg/l
Exposure time :	48 h

Acute (short-term) algae toxicity

Parameter :	ErC50 (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5)
Species :	Pseudokirchneriella subcapitata

Evaluation parameter :	Inhibition of growth rate
Effective dose :	0,049 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	EC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 26183-52-8)
Species :	Algae
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	10 - 100 mg/l
Exposure time :	96 h
Method :	DIN 38412 / part 9
Parameter :	EC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Algae
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 100 mg/l
Exposure time :	72 h
Parameter :	EC50 (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Species :	Scenedesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 91,5 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	EC50 (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Species :	Desmodesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 100 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	EC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 97043-91-9)
Species :	Desmodesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 1 mg/l
Exposure time :	72 h
Parameter :	EC50 (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	0,705 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	ErC50 (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Species :	Scenedesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	341 mg/l

Chronic (long-term) algae toxicity

Parameter :	NOEC (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Species :	Algae
Evaluation parameter :	Chronic (long-term) algae toxicity
Effective dose :	> 100 mg/l
Exposure time :	72 h
Method :	OECD 201
Parameter :	NOEC (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Chronic (long-term) algae toxicity
Effective dose :	0,303 mg/l
Exposure time :	72 h
Method :	OECD 201

Bacteria toxicity

Parameter :	EC50 (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; CAS No. : 68391-01-5)
Species :	Bacteria toxicity
Effective dose :	7,75 mg/l
Exposure time :	3 h
Method :	OECD 209
Parameter :	EC10 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 26183-52-8)
Evaluation parameter :	Bacteria toxicity
Effective dose :	48 mg/l
Exposure time :	17 h
Method :	DIN 38412 / part 8
Parameter :	EC50 (TRISODIUM NITRILOTRIACETATE ; CAS No. : 5064-31-3)
Species :	Pseudomonas fluorescens
Evaluation parameter :	Bacteria toxicity
Effective dose :	3200 - 5600 mg/l
Exposure time :	8 h
Method :	DIN 38412 / part 8
Parameter :	EC50 (FATTY ALCOHOL POLYGLYCOL ETHER ; CAS No. : 97043-91-9)
Evaluation parameter :	Bacteria toxicity
Effective dose :	> 1 mg/l
Parameter :	EC50 (TETRAPOTASSIUM DIPHOSPHATE ; CAS No. : 7320-34-5)
Evaluation parameter :	Bacteria toxicity
Effective dose :	> 1000 mg/l
Exposure time :	3 h
Parameter :	EC0 (COCAMIDOPRPOYLAMINE OXIDE ; CAS No. : 1471314-81-4)
Evaluation parameter :	Bacteria toxicity
Effective dose :	10000 mg/l

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Parameter :	LC50 (SODIUM ETHYLENEDIAMINETETRAACETATE ; CAS No. : 64-02-8)
Species :	Acute earthworm toxicity
Effective dose :	156 mg/kg
Exposure time :	336 h
Method :	OECD 207

12.2 Persistence and degradability

Abiotic degradation

No data available.

Biodegradation

The product is easily biodegradable according to OECD criteria. The surfactant contained in this mixture complies 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

There are no data available on the preparation itself.

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* (disinfectant).

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. Contact a specialist disposal company or the local waste regulator for advice. This should be done in accordance with 'The Hazardous Waste Act'. Can be eliminated with domestic garbage on condition it complies with local regulations.

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE)

Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE)

Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	9
Classification code :	M6
Hazard identification number (Kemler No.) :	90
Tunnel restriction code :	E
Special provisions :	LQ 5 l · E 1
Hazard label(s) :	9 / N

Sea transport (IMDG)

Class(es) :	9
EmS-No. :	F-A / S-F
Special provisions :	LQ 5 l · E 1
Hazard label(s) :	9 / N

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	9
Special provisions :	E 1
Hazard label(s) :	9 / N

14.4 Packing group

III

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 73/78 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

EPA NZ Classes of hazardous properties class 8—corrosive substance, class 9 – substances toxic to the environment
NZ HSNO Approval: HSR005673/HSR005672: Alkyl-benzyl--dimethyl-ammonium chloride, HSNO Approval: HSR003259: Fatty alcohol polyglycol ether, HSNO Approval: HSR003275: Sodium ethylene diamine tetraacetate, HSNO Approval: HSR003542: Trisodium nitrilotriacetate

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.

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

None

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

Standard EN420:2003 General requirements for protective gloves: disposable gloves, e.g. nitrile rubber, material thickness 0.1 mm (Australian Standard 2161).
Long-term exposure (Level 6: < 480 min): protective gloves, e.g. nitrile rubber, material thickness 0.7 mm (Australian Standard 2161).
Personal eye protection - Eye and face protectors for occupational applications: safety glasses (Australian Standard AS 1336 and AS/NZS 1337.1:2010).

16.4 Classification for mixtures and used evaluation method according to GHS

No information available.

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

H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful 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.