

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

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

1.1 Product identifier

FD 322 Quick acting disinfection

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

Relevant identified uses

FD 322 is an aldehyde-free, ready-to-use solution for the rapid disinfection of alcohol-resistant surfaces of medical devices.

Product Categories [PC]

PC0 - PC 0 - 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.com
in 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

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to GHS

Hazard pictograms



Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Warning

Hazard components for labelling

1-PROPANOL ; CAS No. : 71-23-8

Hazard statements

H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves and eye/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235 Store in a well-ventilated place. Keep cool.
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 322 contains alcohols, fragrances and auxiliary agents in aqueous solution.

Hazardous ingredients

1-PROPANOL ; REACH registration No. : 01-2119486761-29 ; EC No. : 200-746-9; CAS No. : 71-23-8

Weight fraction : $\geq 30 - < 35$ %
Classification : Flam. Liq. 2 ; H225 Eye Dam. 1 ; H318 STOT SE 3 ; H336

ETHANOL ; REACH registration No. : 01-2119457610-43 ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction : $\geq 25 - < 30$ %
Classification: Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

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

Weight fraction : $\geq 1 - < 5$ %
Classification: Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

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

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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

No information available.

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

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

None known.

Hazardous combustion products

Vapours can form explosive mixtures with air.

5.3 Advice for firefighters

Cool endangered containers with water in case of fire.

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. When using do not smoke. 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. Keep away from sources of ignition - No smoking. Provide adequate ventilation. Do not breathe vapour/aerosol.

Protective measures

Measures to prevent fire

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

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

Do not store together with oxidizing, self-igniting substances and highly flammable solid substances. 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

ETHANOL ; CAS No. : 64-17-5

Limit value type (country of origin) : TLV/TWA (NZ)

Limit value : 1000 ppm / 1880 mg/m³

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

Limit value type (country of origin) : TLV/STEL (NZ)

Limit value : 500 ppm / 1230 mg/m³

Limit value type (country of origin) : TLV/TWA (NZ)

Limit value : 400 ppm / 983 mg/m³

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

DNEL/DMEL

Limit value type : DNEL Consumer (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Inhalation

Exposure frequency : Short-term (acute)

Limit value : 1036 mg/m³

Limit value type : DNEL Consumer (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Dermal

Exposure frequency : Long-term (repeated)

Limit value : 81 mg/kg

Limit value type : DNEL Consumer (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Inhalation

Exposure frequency : Long-term (repeated)

Limit value : 80 mg/m³

Limit value type : DNEL Consumer (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Oral

Exposure frequency : Long-term (repeated)

Limit value : 61 mg/kg

Limit value type : DNEL worker (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Inhalation

Exposure frequency : Short-term (acute)

Limit value : 1723 mg/m³

Limit value type : DNEL worker (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Dermal

Exposure frequency : Long-term (repeated)

Limit value : 136 mg/kg

Limit value type : DNEL worker (systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Inhalation

Exposure frequency : Long-term (repeated)

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Limit value : 268 mg/m³
Limit value type : DNEL Consumer (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 950 mg/m³
Limit value type : DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Oral
Exposure frequency : Long-term (repeated)
Limit value : 87 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 206 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 114 mg/m³
Limit value type : DNEL worker (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 1900 mg/m³
Limit value type : DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 343 mg/kg
Safety factor : 24 h
Limit value type : DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 950 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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Limit value type :	PNEC (Aquatic, freshwater) (1-PROPANOL ; CAS No. : 71-23-8)
Limit value :	10 mg/l
Limit value type :	PNEC (Aquatic, marine water) (1-PROPANOL ; CAS No. : 71-23-8)
Limit value :	1 mg/l
Limit value type :	PNEC (Industrial) (1-PROPANOL ; CAS No. : 71-23-8)
Exposure route :	Soil
Limit value :	2,2 mg/kg
Limit value type :	PNEC (Sediment, freshwater) (1-PROPANOL ; CAS No. : 71-23-8)
Limit value :	22,8 mg/kg
Limit value type :	PNEC (Sediment, marine water) (1-PROPANOL ; CAS No. : 71-23-8)
Limit value :	2,28 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (1-PROPANOL ; CAS No. : 71-23-8)
Exposure route :	Water (Including sewage plant)
Limit value :	96 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,96 mg/l
Limit value type :	PNEC (Aquatic, marine water) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,79 mg/l
Limit value type :	PNEC (Industrial) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Soil
Limit value :	0,63 mg/kg
Limit value type :	PNEC (Sediment, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	3,6 mg/kg
Limit value type :	PNEC (Sediment, marine water) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	2,9 mg/kg
Limit value type :	PNEC (Secondary poisoning) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	729 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	580 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) (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

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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

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 respiratory 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 : colourless

Odour : Alcohol

Safety relevant basis data

Melting point/melting range :	(1013 hPa)		No data available
Initial boiling point and boiling range :	(1013 hPa)		79 - 84 °C
Decomposition temperature :	(1013 hPa)		No data available
Flash point :			25 °C
Ignition temperature :			360 °C
Lower explosion limit :			2,1 Vol-%
Upper explosion limit :			15 Vol-%
Vapour pressure :	(50 °C)	approx.	150 hPa
Density :	(20 °C)		0,87 - 0,91 g/cm ³
Solvent separation test :	(20 °C)	<	3 %
Water solubility :	(20 °C)		100 Wt %
pH value :			5 - 8,5
log P O/W :			No data available
Flow time :	(20 °C)	<	20 s
Odour threshold :			No data available
Maximum VOC content (EC) :			59,7 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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Vapours can form explosive mixtures with air.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Oxidizing agent.

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 : > 2000 mg/kg
Method : OECD 423
Parameter : ATEmix calculated
Exposure route : Oral
Effective dose : not relevant

Practical experience/human evidence

The product does not have any skin irritating or sensitizing properties. There is no inhalation risk under normal application conditions.

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 : not relevant
Parameter : LC50 (1-PROPANOL ; CAS No. : 71-23-8)
Exposure route : Inhalation
Species : Rat
Effective dose : > 33,8 mg/l
Exposure time : 4 h
Method : OECD 403
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Species : Rat
Effective dose : 125 mg/l
Exposure time : 4 h
Method : OECD 403
Parameter : LC50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Inhalation
Species : Mouse
Effective dose : 27,2 mg/l
Exposure time : 4 h

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

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

Irritant and corrosive effects

In vitro skin corrosion: non-irritant. Method : OECD 431. Rabbit 's eye: no irritation. Method : OECD 405.

Sensitisation

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

Repeated dose toxicity (subacute, subchronic, chronic)

Subacute oral toxicity

Parameter : NOAEL(C) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Oral
Species : Rat
Effective dose : 1730 mg/kg
Exposure time : 24 h
Method : OECD 408

Subacute inhalation toxicity

Parameter : NOAEL(C) (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Species : Rat
Effective dose : > 20 mg/l

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 GHS as well as in-house investigations.

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 (ETHANOL ; CAS No. : 64-17-5)
Species : Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 11200 mg/l
Parameter : LC50 (1-PROPANOL ; CAS No. : 71-23-8)
Species : Pimephales promelas (fathead minnow)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 4480 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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

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 (ETHANOL ; CAS No. : 64-17-5)
Species : Pimephales promelas (fathead minnow)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : > 15000 mg/l
Exposure time : 96 h

Chronic (long-term) fish toxicity

Parameter : NOEC (ETHANOL ; CAS No. : 64-17-5)
Species : Ceriodaphnia spec
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 9,6 mg/l

Acute (short-term) daphnia toxicity

Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 9200 - 14300 mg/l
Exposure time : 48 h
Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 3644 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 (ETHANOL ; CAS No. : 64-17-5)
Species : Ceriodaphnia spec
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : 1806 mg/l

Chronic (long-term) daphnia toxicity

Parameter : NOEC (1-PROPANOL ; CAS No. : 71-23-8)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : > 100 mg/l
Exposure time : 504 h
Method : OECD 211

Acute (short-term) algae toxicity

Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8)
Species : Scenedesmus subspicatus
Evaluation parameter : Inhibition of growth rate

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Effective dose : 3100 mg/l
Exposure time : 168 h
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 : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Chlorella vulgaris
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 275 mg/l
Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Selenastrum capricornutum
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 440 mg/l
Parameter : IC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Scenedesmus subspicatus
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : > 100 mg/l
Parameter : ErC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : > 4800 mg/l
Exposure time : 72 h
Method : OECD 201

Chronic (long-term) algae toxicity

Parameter : NOEC (1-PROPANOL ; CAS No. : 71-23-8)
Species : Algae
Evaluation parameter : Chronic (long-term) algae toxicity
Effective dose : 1150 mg/l
Exposure time : 48 h

Bacteria toxicity

Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8)
Species : Pseudomonas putida
Evaluation parameter : Bacteria toxicity
Effective dose : 2700 mg/l
Exposure time : 16 h
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

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Effects in sewage plants

Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Inoculum : Effects in sewage plants
Effective dose : 5800 mg/l
Exposure time : 4 h

12.2 Persistence and degradability

Abiotic degradation

No data available.

Biodegradation

The product is easily biodegradable according to OECD criteria. Method : OECD 301 D.

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 1987

14.2 UN proper shipping name

Land transport (ADR/RID)

ALCOHOLS, N.O.S. (N-PROPANOL · ETHANOL)

Sea transport (IMDG)

ALCOHOLS, N.O.S. (N-PROPANOL · ETHANOL)

Air transport (ICAO-TI / IATA-DGR)

ALCOHOLS, N.O.S. (N-PROPANOL · ETHANOL)

14.3 Transport hazard class(es)

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

Land transport (ADR/RID)

Class(es) : 3
Classification code : F1
Hazard identification number (Kemler No.) : 30
Tunnel restriction code : D/E
Special provisions : LQ 5 I · E 1
Hazard label(s) : 3

Sea transport (IMDG)

Class(es) : 3
EmS-No. : F-E / S-D
Special provisions : LQ 5 I · E 1
Hazard label(s) : 3

Air transport (ICAO-TI / IATA-DGR)

Class(es) : 3
Special provisions : E 1
Hazard label(s) : 3

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No

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

EPA NZ Classes of hazardous properties class 3—flammable liquids
NZ HSNO Approval: HSR001215: 1-propanol, HSNO Approval: HSR001144: Ethanol, HSNO Approval: HSR001180: 2-propanol

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
CO₂ = Carbon dioxide
DMEL = Derived Minimal Effect Level

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
Print date : 30.07.2019

Version : 1.0.0

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)

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

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.

Safety Data Sheet

according to GHS

Trade name : FD 322 Quick acting disinfection
Revision : 30.07.2019
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