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

Trade name :	Vector®/RinsEndo Desinfektion		
Revision date :	12.01.2023	**Version (Revision) :**	4.0.0 (3.0.1)
Print date :	20.07.2023		

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

1.1 Product identifier

Vector®/RinsEndo Desinfektion

Unique Formula Identifier : 7MFW-FY0A-EF0R-S1AS

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

Relevant identified uses

Vector®/RinsEndo Disinfection is an aldehyde-free ready-to-use solution for disinfecting and cleaning of inner parts of the Dürr Dental Vector® and RinsEndo.

Products Category [PC]

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

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 Great Britain/Ireland:
DÜRR DENTAL [Products] UK Ltd., 14 Linnell Way - Telford Way Industrial Estate, Kettering Northants NN16 8PS, United Kingdom, info@duerruk.com

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]

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

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

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

Classification procedure

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

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

Hazard statements

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
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+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

The mixture does not contain any substances that have endocrine disrupting properties. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description

Vector®/RinsEndo Disinfection contains alcohols and auxiliary agents in aqueous solution.

Hazardous ingredients

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

Weight fraction :	≥ 30 - < 35 %
Classification 1272/2008 [CLP] :	Flam. Liq. 2 ; H225 Eye Dam. 1 ; H318 STOT SE 3 ; H336

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

Weight fraction :	≥ 25 - < 30 %
Classification 1272/2008 [CLP] :	Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319
Specific Conc. Limits :	Eye Irrit. 2 ; H319: C ≥ 50 %

PROPAN-2-OL ; REACH 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

Additional information

For full text of Hazard- and EU Hazard-statements: 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.

Following 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 serious eye irritation. Vapours may cause drowsiness and dizziness.

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 jet 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 (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

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 and in a well-ventilated place.

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)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

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

Limit value type (country of origin) :	TLV/STEL (GB)
Limit value :	250 ppm / 625 mg/m³
Limit value type (country of origin) :	TLV/TWA (GB)
Limit value :	200 ppm / 500 mg/m³

ETHANOL ; CAS No. : 64-17-5

Limit value type (country of origin) :	TLV/TWA (GB)
Limit value :	1000 ppm / 1920 mg/m³

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

Limit value type (country of origin) :	TLV/STEL (GB)
Limit value :	500 ppm / 1250 mg/m³
Limit value type (country of origin) :	TLV/TWA (GB)
Limit value :	400 ppm / 999 mg/m³

DNEL-/PNEC-values

There are no data available on the preparation itself.

DNEL/DMEL

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

Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	1036 mg/m³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	81 mg/kg
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	80 mg/m³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	61 mg/kg

Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	1723 mg/m³
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	136 mg/kg
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	268 mg/m³

ETHANOL ; CAS No. : 64-17-5

Limit value type :	DNEL Consumer (local)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	950 mg/m³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	87 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	206 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	114 mg/m³
Limit value type :	DNEL worker (local)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	1900 mg/m³
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	343 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	950 mg/m³

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

Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	319 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	89 mg/m³
Limit value type :	DNEL Consumer (systemic)

Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	26 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	888 mg/kg
Assessment factor :	24 h
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	500 mg/m^3

PNEC

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

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	10 mg/l
Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	6,83 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	1 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	0,683 mg/l
Limit value type :	PNEC (Industrial)
Exposure route :	Soil
Limit value :	2,2 mg/kg
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	22,8 mg/kg
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	27,5 mg/kg
Limit value type :	PNEC (Sediment, marine water)
Limit value :	2,28 mg/kg
Limit value type :	PNEC (Sediment, marine water)
Limit value :	2,75 mg/kg
Limit value type :	PNEC (Soil)
Limit value :	1,49 mg/kg
Limit value type :	PNEC (Sewage treatment plant)
Exposure route :	Water (Including sewage plant)
Limit value :	96 mg/l

ETHANOL ; CAS No. : 64-17-5

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	0,96 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	0,79 mg/l
Limit value type :	PNEC (Industrial)
Exposure route :	Soil
Limit value :	0,63 mg/kg
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	3,6 mg/kg
Limit value type :	PNEC (Sediment, marine water)
Limit value :	2,9 mg/kg
Limit value type :	PNEC (Secondary poisoning)
Limit value :	729 mg/kg
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	580 mg/l

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

Limit value type :	PNEC (Aquatic, freshwater)
Limit value :	140,9 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Limit value :	140,9 mg/l
Limit value type :	PNEC (Industrial)
Exposure route :	Soil
Limit value :	28 mg/kg
Limit value type :	PNEC (Sediment, freshwater)
Limit value :	552 mg/kg
Limit value type :	PNEC (Sediment, marine water)
Limit value :	552 mg/kg
Limit value type :	PNEC (Secondary poisoning)
Limit value :	160 mg/kg
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	2251 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Eye glasses with side protection 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

Usually no personal respirative protection necessary.

General information

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.

Other protection measures

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 characteristics

Melting point/freezing point :	(1013 hPa)	not determined	
Initial boiling point and boiling range :	(1013 hPa)	not determined	
Decomposition temperature :	(1013 hPa)	not determined	
Flash point :		25	°C
Auto-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)	approx.	0,89	g/cm³	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		100	Weight-%	
pH value :			6,5 - 7,5		
log P O/W :			No data available		
Flow time :	(20 °C)	<	20	s	DIN-cup 4 mm
Odour threshold :			No data available		
Maximum VOC content (EC) :			59,7	Weight-%	

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
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 hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity
Based on available data, the classification criteria are not met.

Acute oral toxicity

Parameter :	LD50
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 423
Parameter :	ATEmix
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
Exposure route : Dermal
Effective dose : not relevant

Acute inhalation toxicity

Parameter : ATEmix
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
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 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Inhalation (vapour)
Species : Rat
Effective dose : > 10000 ppm
Exposure time : 6 h
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Inhalation (vapour)
Species : Rat
Effective dose : 47,5 mg/l

Corrosion

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

Skin corrosion/irritation

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

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

Carcinogenicity

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

Germ cell mutagenicity

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

Reproductive toxicity

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substances that have endocrine disrupting properties.

Additional information

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

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

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
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) toxicity to crustacea

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) toxicity to aquatic invertebrate

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) toxicity to algae and cyanobacteria

Parameter :	EC50 (1-PROPANOL ; CAS No. : 71-23-8)
Species :	Scenedesmus subspicatus
Evaluation parameter :	Inhibition of growth rate
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 (1-PROPANOL ; CAS No. : 71-23-8)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	9170 mg/l
Exposure time :	48 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) toxicity to aquatic algae and cyanobacteria

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

Toxicity to microorganisms

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 :	EC50 (1-PROPANOL ; CAS No. : 71-23-8)
Evaluation parameter :	Bacteria toxicity
Effective dose :	> 1000 mg/l
Exposure time :	3 h
Method :	OECD 209
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

Sewage treatment plant

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

Parameter :	Biodegradation (PROPAN-2-OL ; CAS No. : 67-63-0)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Degradation rate :	> 95 %
Method :	OECD 301E

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

Distribution

There are no data available on the preparation itself.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

The mixture does not contain any substances that have endocrine disrupting properties.

12.7 Other adverse effects

No information available.

12.8 Additional ecotoxicological information

Prevent from flowing into surface water/ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

After intended use

Disposal operations

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

Recovery operations

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

itself.

Waste codes/waste designations according to EWC/AVV

Concentrate/larger quantities: 18 01 06* (disinfectant).

SECTION 14: Transport information

14.1 UN number

UN 1987

14.2 UN proper shipping name

Land transport (ADR/RID)

ALCOHOLS, N.O.S. (1-PROPANOL · ETHANOL)

Sea transport (IMDG)

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

Air transport (ICAO-TI / IATA-DGR)

ALCOHOLS, N.O.S. (1-PROPANOL · ETHANOL)

14.3 Transport hazard class(es)

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 l · E 1
Hazard label(s) :	3

Sea transport (IMDG)

Class(es) :	3
EmS-No. :	F-E / S-D
Special Provisions :	LQ 5 l · 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 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Use restriction according to REACH annex XVII, no. : 3, 40, 75

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.

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

02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 03. Hazardous ingredients · 11. Acute toxicity · 11. Corrosion · 11. Skin corrosion/irritation · 11. Serious eye damage/eye irritation · 11. Respiratory or skin sensitisation · 11. Carcinogenicity · 11. Germ cell mutagenicity · 11. Reproductive toxicity · 11. STOT-single exposure · 11. STOT-repeated exposure · 11. Aspiration hazard · 12. Aquatic toxicity · 15. Restrictions on use

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]

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

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

Follow the instructions 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.