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

Trade name :	MD 550 Mundspülbecken-Reiniger		
Revision :	11.12.2018	**Version (Revision) :**	5.0.0 (4.0.1)
Print date :	12.12.2018		

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

1.1 Product identifier
MD 550 Mundspülbecken-Reiniger

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
MD 550 is a special, ready-to-use, antibacterial preparation that cleans and cares for spittoon bowls of dental units.

Product Categories [PC]

PC35 - Washing and cleaning products

Uses advised against
None, if handled according to order.

Remark
The product is intended for professional use.

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

Street : Max-Planck-Straße 27

Postal code/city : 70806 Kornwestheim

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
Tel: +44 1536 526740, Fax.: +44 1536 526749, 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]
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

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

Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.

H319	Causes serious eye irritation.

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

MD 550 contains alcohols, non-ionic surfactants, organic acids, benzylsalicylate, fragrances and auxiliary agents in aqueous solution.

Hazardous ingredients

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

Weight fraction :	≥ 40 - < 45 %
Classification 1272/2008 [CLP] :	Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

CITRIC ACID MONOHYDRATE ; REACH registration No. : 01-2119457026-42 ; EC No. : 201-069-1; CAS No. : 5949-29-1

Weight fraction :	≥ 3 - < 8 %
Classification 1272/2008 [CLP] :	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 :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

HYDROXYETHYL CELLULOSE, CATIONIC ; REACH registration No. : - ; EC No. : Polymer; CAS No. : 68610-92-4

Weight fraction :	< 0,5 %
Classification 1272/2008 [CLP] :	Aquatic Chronic 2 ; H411

FATTY ALCOHOL ALKOXYLATE ; REACH registration No. : 02-2119552554-37 ; CAS No. : 111905-53-4

Weight fraction :	< 0,25 %
Classification 1272/2008 [CLP] :	Acute Tox. 4 ; H302 Eye Irrit. 2 ; H319 Aquatic Chronic 3 ; H412

BENZYL SALICYLATE ; REACH registration No. : 01-2119969442-31 ; EC No. : 204-262-9; CAS No. : 118-58-1

Weight fraction :	< 0,1 %
Classification 1272/2008 [CLP] :	Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 3 ; H412

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

Causes serious eye irritation.

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

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 (GB)
Limit value :	1000 ppm / 1920 mg/m^3

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

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

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

DNEL/DMEL

Limit value type :	DNEL Consumer (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	950 mg/m^3
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/m^3
Limit value type :	DNEL worker (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	1900 mg/m^3

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

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

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 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)	approx.	95	°C	
Decomposition temperature :	(1013 hPa)		No data available		
Flash point :			23	°C	
Ignition temperature :			425	°C	
Lower explosion limit :			3,5	Vol-%	
Upper explosion limit :			15	Vol-%	
Vapour pressure :	(50 °C)	approx.	160	hPa	
Density :	(20 °C)		0,92 - 0,96	g/cm^3	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		100	Wt %	
pH value :			2 - 3		
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) :		42,8	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
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
There are no data available on the mixture itself.

Acute effects
Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 300 - 2000 mg/kg
Parameter :	LD50 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Exposure route :	Oral
Species :	Mouse
Effective dose :	5400 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	10470 mg/kg
Method :	OECD 401
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Oral
Species :	Rat
Effective dose :	5280 mg/kg
Parameter :	LD50 (HYDROXYETHYL CELLULOSE, CATIONIC ; CAS No. : 68610-92-4)
Exposure route :	Oral
Species :	Rat

Effective dose : > 10000 mg/kg
Parameter : LD50 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Exposure route : Oral
Species : Rat
Effective dose : 11700 mg/kg
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Oral
Species : Rat
Effective dose : 5840 mg/kg
Method : OECD 401
Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Oral
Species : Rabbit
Effective dose : 6300 mg/kg

Practical experience/human evidence

Causes serious eye irritation.

Acute dermal toxicity

Parameter : ATEmix calculated
Exposure route : Dermal
Effective dose : not relevant
Parameter : LD50 (HYDROXYETHYL CELLULOSE, CATIONIC ; CAS No. : 68610-92-4)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 4000 mg/kg
Parameter : LD50 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Dermal
Species : Rabbit
Effective dose : 12800 mg/kg
Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route : Dermal
Species : Rabbit
Effective dose : 13900 mg/kg
Method : OECD 402
Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Dermal
Species : Rabbit
Effective dose : 20 g/kg

Acute inhalation toxicity

Parameter : ATEmix calculated
Exposure route : Inhalative (vapour)
Effective dose : not relevant
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 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	125 mg/l
Exposure time :	4 h
Method :	OECD 403

Irritant and corrosive effects

Causes serious eye irritation.

Sensitisation

No data available.

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

There are no data available on the preparation itself.

Acute (short-term) fish toxicity

Parameter :	LC50 (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 (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 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	440 - 760 mg/l
Exposure time :	96 h

Parameter :	LC50 (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h
Parameter :	LC50 (HYDROXYETHYL CELLULOSE, CATIONIC ; CAS No. : 68610-92-4)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	2,4 - 3,7 mg/l
Exposure time :	96 h
Parameter :	LC50 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Species :	Carassius auratus (goldfish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	440 - 760 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) 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 (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 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	120 mg/l
Exposure time :	72 h
Parameter :	EC50 (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h
Parameter :	EC50 (HYDROXYETHYL CELLULOSE, CATIONIC ; CAS No. : 68610-92-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	34 - 48 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 (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	> 0,1 - 1 mg/l

Acute (short-term) algae toxicity

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 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Species :	Scenedesmus quadricauda
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	640 mg/l
Exposure time :	168 h
Parameter :	EC50 (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Species :	Algae
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	0,1 - 1 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

Bacteria toxicity

Parameter :	Bacteria toxicity (FATTY ALCOHOL ALKOXYLATE ; CAS No. : 111905-53-4)
Species :	Bacteria toxicity
Effective dose :	> 1000 mg/l
Parameter :	EC50 (HYDROXYETHYL CELLULOSE, CATIONIC ; CAS No. : 68610-92-4)
Evaluation parameter :	Bacteria toxicity
Effective dose :	2500 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 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Species :	Pseudomonas putida
Evaluation parameter :	Bacteria toxicity
Effective dose :	> 10000 mg/l
Exposure time :	16 h
Parameter :	EC0 (CITRIC ACID MONOHYDRATE ; CAS No. : 5949-29-1)
Evaluation parameter :	Bacteria toxicity
Effective dose :	10000 mg/l
Parameter :	EC10 (PROPAN-2-OL ; CAS No. : 67-63-0)
Species :	Pseudomonas putida
Evaluation parameter :	Bacteria toxicity
Effective dose :	5175 mg/l
Exposure time :	18 h

Effects in sewage plants

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

All active agents are biodegradable at the dilution rates arising in the sewage system. The organic ingredients are biodegradable at the dilution rates arising in the sewage system.

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: 07 06 04* other organic solvents.

Waste treatment options

Appropriate disposal / Product

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

Appropriate disposal / Package

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

SECTION 14: Transport information

14.1 UN number

UN 1170

14.2 UN proper shipping name

Land transport (ADR/RID)

ETHANOL, SOLUTION

Sea transport (IMDG)

ETHANOL, SOLUTION

Air transport (ICAO-TI / IATA-DGR)

ETHANOL, SOLUTION

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	3
Classification code :	F1
Hazard identification number (Kemler No.) :	30
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 Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

National regulations

Restrictions of occupation

According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented.

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

03. Hazardous ingredients · 08. Occupational exposure limit values

16.2 Abbreviations and acronyms

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimates
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CMR = Carcinogen, Mutagen or Reproductive toxicant
CO_2 = Carbon dioxide
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = European Commission
EC50 = Half maximal effective concentration
EN = European Standard (Norm)
EU = European Union
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
H statement = GHS Hazard statement
IATA = International Air Transport Association ICAO-TI = International Civil Aviation Organization-Technical Instructions
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
LogPow = Logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOEC/NOEL = No observed effect concentration/level
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RMM = Risk Management Measure
RRN = REACH Registration Number
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
SVHC = Substances of Very High Concern
TLV/STEL = Threshold limit value/short-term exposure limit
TLV/TWA = Threshold limit value/time weighted average

UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

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

No information available.

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

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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.