

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product code : Hygienfresh Top Degreaser

Trades code : A88-005

Product line: Hygienfresh

UFI: U0T0-70R4-V00M-5S5P

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

Sectors of use:

Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.comEmail tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112

Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266

London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification**2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05, GHS07

Hazard Class and Category Code(s):

Skin Sens. 1B, Eye Dam. 1

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

The product, if brought into contact with skin can cause skin sensitization.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS05, GHS07 - Danger



Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

Prevention

P261 - Avoid breathing vapors.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 - IN CASE OF CONTACT WITH SKIN: wash thoroughly with soap and water

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER/doctor/physician

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

Disposal

P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, ethanol, Steareth-21, (Coconut oil alkyl) amine, ethoxylated, 1-Propaneammonium, 3-amino-N,N,N-trimethyl-, N-(ethoxylated castor oil acyl) derivs., Me sulfate (6-EO + 10.7-EO), p-mentha-1,4(8)-diene, Subtilisin, 2-aminoethanol, monoester with boric acid

Contains (Reg.EC 648/2004):

5% < 15% non-ionic surfactants, < 5% enzymes, perfumes, Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] (3:1), cationic surfactants, phosphonates, Coumarin, Geraniol, D-Limonene ((S)-p-menta-1,8-diene), Linalool

Content of VOC ready to use condition: 0,56 %

UFI: U0T0-70R4-V00M-5S5P

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION 3. Composition/information on ingredients**3.1 Substances**

Irrelevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Fatty alcohol ethoxylate	$\geq 5 \leq 10\%$	Acute Tox. 4, H302; Eye Dam. 1, H318 Limits: Eye Irrit. 2, H319 %C ≤ 10 ; Eye Dam. 1, H318 %C >10;	ND	64425-86-1	ND	NR
1-Propaneamminium, 3-amino-N,N,N-trimethyl-, N-(ethoxylated castor oil acyl) derivs., Me sulfate (6-EO + 10.7-EO)	$\geq 1 < 5\%$	Skin Sens. 1, H317; Eye Dam. 1, H318	ND	784144-40-7	630-545-5	NR
(Coconut oil alkyl) amine, ethoxylated	$\geq 1 < 5\%$	Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412	ND	61791-14-8	500-152-2	NR
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - FEMA 0	$\geq 0,1 < 1\%$	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 100 100	ND	68424-85-1	270-325-2	NR
ethanol	< 0,1%	Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	NR
Subtilisin substance for which there are Community workplace exposure limits	< 0,1%	Skin Irrit. 2, H315; Eye Dam. 1, H318; Resp. Sens. 1, H334; STOT SE 3, H335	647-012-00-8	9014-01-1	232-752-2	01-2119480 434-38
2-aminoethanol, monoester with boric acid	< 0,1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	ND	10377-81-8	233-829-3	NR

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

In case of contact with skin, wash immediately with water and soap.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs: Get medical advice/attention.

If medical advice is needed, have product container or label at hand.

Immediately call a POISON CENTER/doctor/physician

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing.

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.

Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
Wear protective gloves/protective clothing/eye protection/face protection.
In residential areas do not use on large surfaces.
At work do not eat or drink.
Contaminated work clothing should not be allowed out of the workplace.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and direct exposure of sunlight.

7.3. Specific end use(s)

Private households (= general public = consumers):
Handle with care.
Store in ventilated place away from heat sources,
Keep the container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
ethanol:

Component CAS-No. Value Control parameters

Basis

Ethanol-17-64 TWA 5 ppm 1.000

1.920 mg/m³

UK. EH40 WEL-Workplace Exposure Limits

Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

Subtilisin:

ACGIH TLV: Ceiling: 0.00006 mg/m³ Ceiling (as crystalline active enzyme, listed under Subtilisins)

Belgium: 0.00006 mg/m³ Maximum Limit Value (8 hours)

Denmark: Ceiling: 0.00006 mg/m³

Ireland: TWA: 0.00006 mg/m³ STEL: 0.00006 mg/m³

Netherlands: Ceiling: 0.00006 mg/m³

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Norway: 0.00006 mg/m³ Ceiling
Portugal: Ceiling: 0.00006 mg/m³
Spain: VLA-EC: 0.00006 mg/m³
Sweden: 1 glycineunit/m³ LLV 3 glycineunit/m³ LLV
Switzerland: STEL: 0.00006 mg/m³
Germany: = 1 glycineunit/m³ LLV = 3 glycineunit/m³ LLV
United Kingdom: 0.00004 mg/m³ TWA

- Substance: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
DNEL

Systemic effects Long term Workers inhalation = 3,96 (mg/m³)
Systemic effects Long term Workers dermal = 5,7 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,64 (mg/m³)
Systemic effects Long term Consumers dermal = 3,4 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 3,4 (mg/kg bw/day)

PNEC

Sweet water = 0,0009 (mg/l)
sediment Sweet water = 12,27 (mg/kg/sediment)
Sea water = 0,00096 (mg/l)
sediment Sea water = 13,09 (mg/kg/sediment)
intermittent emissions = 0,00016 (mg/l)
STP = 0,4 (mg/l)
ground = 7 (mg/kg ground)

- Substance: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m³)
Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 114 (mg/m³)
Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)

PNEC

Sweet water = 0,96 (mg/l)
sediment Sweet water = 3,6 (mg/kg/sediment)
Sea water = 0,79 (mg/l)
sediment Sea water = 2,9 (mg/kg/sediment)
intermittent emissions = 2,75 (mg/l)
STP = 580 (mg/l)
ground = 0,63 (mg/kg ground)

- Substance: Subtilisin

DNEL

Systemic effects Long term Consumers oral = 1,8 (mg/kg bw/day)
Systemic effects Short term Consumers oral = 3,6 (mg/kg bw/day)
Local effects Long term Workers inhalation = 0,06 (mg/m³)
Local effects Long term Consumers inhalation = 0,000015 (mg/m³)

PNEC

Sweet water = 0,0017 (mg/l)
Sea water = 0,00017 (mg/l)
intermittent emissions = 0,0009 (mg/l)
STP = 65 (mg/l)
ground = 0,568 (mg/kg ground)

- Substance: 2-aminoethanol, monoester with boric acid

DNEL

Systemic effects Long term Workers inhalation = 5,9 (mg/m³)

Systemic effects Long term Workers dermal = 3,3 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,4 (mg/m³)
Systemic effects Long term Consumers dermal = 1,7 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 1,7 (mg/kg bw/day)
PNEC
Sweet water = 0,026 (mg/l)
sediment Sweet water = 0,054 (mg/kg/sediment)
Sea water = 0,003 (mg/l)
sediment Sea water = 0,005 (mg/kg/sediment)
intermittent emissions = 0,26 (mg/l)
STP = 10 (mg/l)
ground = 0,014 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:
Private households (= general public = consumers):
No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen):
No specific monitoring foreseen

Individual protection measures:



(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Handle with gloves. Gloves must be checked before use. Use a technique suitable for removing gloves (without touching the outer surface of the glove) to avoid the skin contact with this product. Dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands. The selected protective gloves have to satisfy the requirements of EU directive 89/686 / EEC and the resulting EN 374 standards.

Full contact

Material: Nitrile rubber

minimum thickness: 0.11 mm

breakthrough time: 480 min

The choice of an appropriate glove depends not only on the material but also on other quality characteristics which vary from one manufacturer to another.

For the choice of the type of gloves to use, consult the supplier / manufacturer of the gloves.

Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Related to contained substances:

Subtilisin:

The local authority must be informed if the losses cannot be limited

Waste water must be conveyed to the waste water treatment plant

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical and chemical properties	Value	Determination method
Appearance	Liquid	
Colour	white	
Odour	characteristic	
Odour threshold	not determined	
pH	10.5 - 11.5	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	> 60 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	nonflammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	1.00 - 1.06 g/cm ³	
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 0,56 %

SECTION 10. Stability and reactivity**10.1. Reactivity**

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.

It can generate toxic gases to contact with inorganic sulfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = 12.586,9 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: ethanol: LD50 Oral-rat-7.060 mg/kg

Remarks: Lungs, Thorax, or Respiration: Other changes.

LC50 Inhalation-rat-10:0-20000 ppm

(b) skin corrosion/irritation: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result:

Method: DOT Corrosive Exposure time: 12:0 am

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

2-aminoethanol, monoester with boric acid: Irritation of the skin:

Rabbit (New Zealand White): non-irritant, (1993). Eye irritation:

Rabbit (New Zealand White): moderately irritating, 1998

Bovine (in vitro study): not severely irritating or corrosive, 2010

(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Caustic Method: DOT

(d) respiratory/skin sensitization: The product, if brought into contact with skin can cause skin sensitization.

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: Buehler guinea pig Test Classification:

Did not cause sensitization on laboratory animals.

Result: not sensitizing Method: OECD Test Guideline 406

Subtilisin: Respiratory system: substance-sensitizing (human experience)

(e) germ cell mutagenicity: Subtilisin: No indication of mutagenic effects (OECD TG 471, 473, 476)

(f) carcinogenicity: based on available data, the classification criteria are not met.

(g) reproductive toxicity: ethanol: Reproductive toxicity-Human-female-Oral

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.

Effects on Newborn: Drug dependence.

Issued on 09/20/2021 - Rel. # 4 on 09/20/2021

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(h) specific target organ toxicity (STOT) single exposure: Subtilisin: Target organ-specific toxic (single exposure) Irritant, respiratory tract (ACGIH 2001)

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

Fatty alcohol ethoxylate:

LD50 (rat) Oral (mg/kg body weight) = 3100

1-Propaneammonium, 3-amino-N,N,N-trimethyl-, N-(ethoxylated castor oil acyl) derivs., Me sulfate (6-EO + 10.7-EO):

LD50 - Via: Orale - Species: Rat = 300-2000 mg / kg - Source: CESIO

b) skin corrosion / irritation:

Test: Skin irritant - Way: Skin - Species: Negative rabbit - Duration: 4h - Source: CESIO

c) serious eye damage / severe eye irritation:

Test: Serious eye damage - Species: Positive rabbit - Source: CESIO

d) respiratory or skin sensitization:

Test: Skin sensitization - Via: Negative Skin - Source: CESIO

LD50 (rat) Oral (mg/kg body weight) = 300

(Coconut oil alkyl) amine, ethoxylated:

Ingestion: acute oral toxicity (LD 50 rat) from 300 to 2000 mg / kg

Eye contact (rabbit) irritating

Skin contact (rabbit) - (4 hours) non-irritating

Sensitization has no sensitizing effects

Inhalation inhalation is only possible as an aerosol, the respiratory tract can be irritated

LD50 (rat) Oral (mg/kg body weight) = 200

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

LD50 (rat) Oral (mg/kg body weight) = 344

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3340

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5

ethanol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of

REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.

CUTE CUTE.

EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.

LD50 (rat) Oral (mg/kg body weight) = 7060

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

Subtilisin:

LD50 (rat) Oral (mg/kg body weight) = 1800

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,13

2-aminoethanol, monoester with boric acid:

Acute oral toxicity

Parameter: LD50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Orally

Species: Rat

Effective dose: > 2000 mg / kg

Acute dermal toxicity

Parameter: discriminating dose. (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Dermal

Species: Rat

Effective dose: > 2000 mg / kg

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information**12.1. Toxicity**

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Related to contained substances:

Fatty alcohol ethoxylate:

Ittiotoxicity:

LC50 (96 h) 1-10 mg/l, Brachydanio rerio

Aquatic invertebrates:

EC50 (48 h) 1-10 mg/l Daphnia magna

Aquatic plants:

EC50 (72 h) 1-10 mg/l Scenedesmus subspicatus

Microorganisms/effects on activated sludge:

CE10 > 1,000 mg/l, activated sludge (DEV-L2)

Chronic toxic to aquatic invertebrates:

NOEC (21 d), 0.33 mg/l Daphnia magna

C(E)L50 (mg/l) = 1

1-Propaneammonium, 3-amino-N,N,N-trimethyl-, N-(ethoxylated castor oil acyl) derivs., Me sulfate (6-EO + 10.7-EO):

LC50 - Species: Carassius Auratus > 100 mg / l - Duration h: 96

EC50 - Species: Daphnia > 100 mg / l - Duration h: 48

C(E)L50 (mg/l) = 100

(Coconut oil alkyl) amine, ethoxylated:

LC50 - Species: Carassius Auratus > 10-100 mg / l - Duration h: 96 - Notes: CESIO

EC50 - Species: Daphnia > 10-100 mg / l - Duration h: 48 - Notes: CESIO

C(E)L50 (mg/l) = 10

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

C(E)L50 (mg/l) = 0,01 100

100

ethanol:

C(E)L50 (mg/l) = 11200

Subtilisin:

C(E)L50 (mg/l) = 0,586

2-aminoethanol, monoester with boric acid:

Acute (short-term) toxicity on fish

Parameter: LC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: Cyprinus carpio

Effective dose: = 617 mg / l

Exposure time: 96 h

Acute (short-term) toxicity to Daphnia

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: Daphnia magna

Effective dose: = 423 mg / l

Exposure time: 48 h

Acute (short-term) toxicity to algae

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: Pseudokirchneriella subcapitata

Effective dose: = 26 mg / l

Exposure time: 72 h

C(E)L50 (mg/l) = 26

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

Related to contained substances:

Fatty alcohol ethoxylate:

Disposal considerations:

> = 90% the bismuth active substance (OECD guideline 303A)

60% > CO₂ formation of theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, c. 4-C)

Readily biodegradable (according to OECD criteria).

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Biodegradability:

OECD Confirmatory > 90% Test Method: OECD 303 A Modified SCAS Test Exposure time: 99% 7 d > Method: OECD Test 302 Evolution CO₂ Concentration: 5 mg/litre Exposure time: 28 d Result: Readily biodegradable.

95.5% Method: OECD 301 B

Subtilisin:

Rapidly biodegradable (OECD TG 301B)

2-aminoethanol, monoester with boric acid:

Parameter: Biodegradation

Effective dose: approx. 73%

Exposure time: 28 days

Parameter: Biodegradation

Effective dose: > 60%

Exposure time: 10 days

Easily biodegradable.

12.3. Bioaccumulative potential

Related to contained substances:

Subtilisin:

Do not bio-accumulate

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information**14.1. UN number or ID number**

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

REGULATION (EU) No 1357/2014 - waste:
HP14 - Ecotoxic

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 1.1. Product identifier, 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 8.1. Control parameters, 8.2. Exposure controls, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.6. Endocrine disrupting properties

Description of the hazard statements exposed to point 3

H302 = Harmful if swallowed.

H318 = Causes serious eye damage.

H317 = May cause an allergic skin reaction.

H412 = Harmful to aquatic life with long lasting effects.

H312 = Harmful in contact with skin.

H314 = Causes severe skin burns and eye damage.

H400 = Very toxic to aquatic life.

H225 = Highly flammable liquid and vapour.

H315 = Causes skin irritation.

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 = May cause respiratory irritation.

H319 = Causes serious eye irritation.

Classification based on data of all mixture components

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation 1272/2008/EC

Regulation 2010/453/EC

** The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.