

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

1.1. Product identifier

Product code : Hygienfresh HygieneBomb Ammorbidente Clean Sense

Trades code : A45-210

Product line: Hygienfresh

UFI: EU21-C0U1-E00K-9X6A

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

Concentrated softener with deep hygiene effect.

Sectors of use:

Industrial Manufacturing[SU3], 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.com

Email 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:

GHS07

Hazard Class and Category Code(s):

Skin Sens. 1A

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

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

2.2. Label elements

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

Pictogram, Signal Word Code(s):

GHS07 - Warning



Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

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

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

Response

P302+P352 - IF ON SKIN: Wash with plenty of water and soap.

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:

Isoeugenol.

Contains (EC Reg. 648/2004):

5% <15% Cationic surfactants, <5% Perfumes, didecyldimonium chloride, Amyl cinnamal, Citronellol, Cinnamyl alcohol, Geraniol, Hexyl cinnamal, Isoeugenol.

Content of VOC ready to use condition: 1,65 %

UFI: EU21-C0U1-E00K-9X6A

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 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 acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	>= 5 < 15%	ATE oral = 5.000,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	157905-74-3	931-203-0	01-2119463 889-16-000 4
Propan-2-ol - FEMA 2929	>= 0,1 < 1%	Flam. Liq. 2, H225;	603-117-00-0	67-63-0	200-661-7	ND

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 2.100,0 mg/kg ATE dermal = 2.100,0 mg/kg ATE inhal = 29,0mg/l/4 h				
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - FEMA 0	>= 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 ATE oral = 344,0 mg/kg ATE dermal = 3.340,0 mg/kg ATE inhal = 5,0mg/l/4 h	ND	68424-85-1	270-325-2	ND
didecyldimethylammonium chloride	>= 0,1 < 1%	Flam. Liq. 3, H226; Acute Tox. 4, H302; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 2, H411 10 1 ATE oral = 238,0 mg/kg ATE dermal = 3.342,0 mg/kg	612-131-00-6	7173-51-5	230-525-2	ND
ethanol	>= 0,1 < 1%	Flam. Liq. 2, H225 ATE oral = 7.060,0 mg/kg ATE dermal = 20.000,0 mg/kg ATE inhal = 20.000,0mg/l/4 h	603-002-00-5	64-17-5	200-578-6	01-2119457 610-43
2-benzylideneheptanal	< 0,1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 3.730,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	122-40-7	204-541-5	ND
Citronellol	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,0 mg/kg ATE dermal = 2.650,0 mg/kg ATE inhal = 1,3mg/l/4 h	ND	106-22-9	203-375-0	01-2119453 995-23-000 0
Isoeugenol	< 0,1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319	604-094-00-X	97-54-1	202-590-7	ND

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		Limits: Skin Sens. 1A, H317 %C >=0,01;				

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):

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.

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 gloves and protective clothing

6.1.2 For emergency responders:

Wear protective gloves and clothing.
Eliminate all open flames and possible sources of ignition.
Not smoking.
Provide adequate ventilation.
Evacuate the danger area and, if necessary, 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.
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)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources.

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:

Propan-2-ol:

TLV: TWA 200 ppm 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK: 200 ppm 500 mg/m peak limitation Category: II (2); Risk group for pregnancy: C; (DFG 2004).

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

- Substance: Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized

DNEL

Systemic effects Long term Workers inhalation = 44 (mg/m³)

Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 13 (mg/m³)

Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)

PNEC

Sweet water = 0,00191 (mg/l)

sediment Sweet water = 0,58 (mg/kg/sediment)

Sea water = 0,000191 (mg/l)

sediment Sea water = 0,058 (mg/kg/sediment)

intermittent emissions = 0,0191 (mg/l)

STP = 2,96 (mg/l)

ground = 0,115 (mg/kg ground)

- Substance: Propan-2-ol

DNEL

Systemic effects Long term Workers inhalation = 500 (mg/m³)

Systemic effects Long term Workers dermal = 888 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 89 (mg/m³)

Systemic effects Long term Consumers dermal = 26 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 26 (mg/kg bw/day)

PNEC

Sweet water = 140,9 (mg/l)

sediment Sweet water = 552 (mg/kg/sediment)

Sea water = 140,9 (mg/l)

sediment Sea water = 552 (mg/kg/sediment)

intermittent emissions = 140,9 (mg/l)

STP = 2251 (mg/l)

ground = 28 (mg/kg ground)

- 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: didecyltrimethylammonium chloride

DNEL

Systemic effects Long term Workers inhalation = 18,2 (mg/m³)
Systemic effects Long term Workers dermal = 8,6 (mg/kg bw/day)

PNEC

Sweet water = 0,002 (mg/l)
sediment Sweet water = 282 (mg/kg/sediment)
Sea water = 0,0002 (mg/l)
sediment Sea water = 0,28 (mg/kg/sediment)
intermittent emissions = 0,00029 (mg/l)
STP = 0,595 (mg/l)
ground = 1,4 (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: Citronellol

DNEL

Systemic effects Long term Workers inhalation = 161,6 (mg/m³)

8.2. Exposure controls

Appropriate engineering controls:



Industrial Manufacturing:
No specific monitoring foreseen

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 e 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:

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Liquid	
Colour	Purple	
Odour	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	

Physical and chemical properties	Value	Determination method
Boiling point or initial boiling point and boiling range	not determined	
Flammability	irrelevant	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	3-4	
Kinematic viscosity	undefined	
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	0,99 - 0,9 g/cm ³ @ 20 °C	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

9.2. Other information

9.2.1 Information with regard to physical hazard classes

No data available.

9.2.2 Other safety characteristics

Content of VOC ready to use condition: 1,65 %

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 = 86.712,8 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

2-benzylideneheptanal: orl-rat LD50: 3730 mg / kg

The dermal LD50 value for alpha-amylcinnamaldehyde was calculated to be greater than 2000 mg/kg.

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

ihl-rat LCLo:1.3 mg/m³/4H

(b) skincorrosion/irritation: Propan-2-ol: Skin-rabbit

Result: Mild skin 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-benzylideneheptanal: skn-rbt 100 mg/24H SEV

skn-gpg 100 mg/24H MOD

Citronellol: skn-rbt 100 mg/24H SEV

Skin - Human - Skin irritation - 48 h

(c) serious eye damage/irritation: ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

Propan-2-ol: Eyes-rabbit

Result: Eye irritation- 24 h

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

(d) respiratory or 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

Citronellol: mouse - May cause sensitization by skin contact.

(e) germ cell mutagenicity: based on available data, the classification criteria are not met.

(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.

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

(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.

Health hazards:

Contact with eyes: Accidental contact of the product with the eyes can cause irritation.

Skin contact: The product is not an irritant. Repeated and prolonged direct contact can degrease and irritate the skin, in some cases causing dermatitis.

Ingestion: The ingested product can cause irritation of the mucous membranes of the throat and digestive system with consequent abnormal digestive symptoms and intestinal disorders.

Inhalation: Prolonged exposure to vapors or mists of the product can cause irritation to the respiratory tract.

Related to contained substances:

Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

Oral, LD50: 5000 mg / kg (rat)

Dermal, LD50:> 2000 mg / kg (rat)

LD50 (rat) Oral (mg/kg body weight) = 5000

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

Propan-2-ol:

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

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause effects on the central nervous system, causing depression. Much greater exposure to the OEL may lead to unconsciousness.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Vertigo. Drowsiness. Headaches. Sore throat. See If Swallowed. CUTE CUTE.

EYE Redness.

INGESTION abdominal pain. Difficulty in breathing. Nausea. State of unconsciousness. Vomiting. (Further see inhalation).

N O T and use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 29

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

didecyldimethylammonium chloride:

Oral, LD50: 238 mg / kg (rat)

Dermal, LD50: 3342 mg / kg (Rabbit)

LD50 (rat) Oral (mg/kg body weight) = 238

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3342

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 concetrazioni 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

2-benzylideneheptanal:

LD50 (rat) Oral (mg/kg body weight) = 3730

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

Citronellol:

LD50 (rat) Oral (mg/kg body weight) = 3450

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2650

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,3

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 acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

fish, CL50 : 1,91 mg/l (OECD 203 (96h))

daphnia, CE50 : 2,23 mg/l (EU Method C.2 (48h))

alga, C150 : 2,14 mg/l (OECD 201 (72h))

C(E)L50 (mg/l) = 1,91

Propan-2-ol:

Toxicity to fish LC50-Pimephales promelas (fathead minnow)-9, 640.00 mg/l-96 h

Toxicity to daphnia and other aquatic invertebrates

-EC50 Daphnia magna (Water flea)-5, 102.00 mg/l- 24 h

EC50 Immobilization-Daphnia magna (Water flea)-6.851 mg/l- 24h

C(E)L50 (mg/l) = 5102

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

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

100

didecyldimethylammonium chloride:

Toxicity to fish

LC50 Pimephales promelas (fathead minnow): 0.19 mg / l; 96 h

Analytical monitoring: yes

US-EPA

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 0.062 mg / l; 48 h

Analytical monitoring: yes

US-EPA

Toxicity to algae

ErC50 *Pseudokirchneriella subcapitata* (green algae): 0.026 mg / l; 96 h

Analytical monitoring: yes

OECD Test Guideline 201

Toxicity to bacteria

EC50 activated sludge: 11 mg / l; 3 h

OECD Test Guideline 209

C(E)L50 (mg/l) = 0,026 10

ethanol:

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

2-benzylideneheptanal:

Fish: 96h LC50: 0.91 mg / L (*Oryzias latipes*)

Crustacea: 48h EC50: 0.28 mg / L (*Daphnia magna*)

Algae: 72h EC50: 2.3 mg / L (*Selenastrum capricornutum*)

C(E)L50 (mg/l) = 0,28

Citronellol:

LC50 (96 h) 14,66 mg/l, *Leuciscus idus*

EC50 (48 h) 17 mg/l, *Daphnia magna*

EC50 (72 h) 2,4 mg/l, *Scenedesmus subspicatus*

C(E)L50 (mg/l) = 2,4

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

12.2. Persistence and degradability

Related to contained substances:

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

didecyldimethylammonium chloride:

> 60%; 28 d; aerobics

OECD Test Guideline 301B

Readily biodegradable

2-benzylideneheptanal:

51% (by BOD), 81% (by TOC)

12.3. Bioaccumulative potential

Related to contained substances:

didecyldimethylammonium chloride:

log Pow: ca. -0.4 (20 ° C)

OECD Test Guideline 107

Bioaccumulation is not expected.

Bioconcentration factor (BCF): 81

Lepomis macrochirus (Bluegill sunfish); 46 d

US-EPA

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

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

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3

- H225 = Highly flammable liquid and vapour.
- H319 = Causes serious eye irritation.
- H336 = May cause drowsiness or dizziness.
- H302 = Harmful if swallowed.
- H312 = Harmful in contact with skin.
- H314 = Causes severe skin burns and eye damage.
- H318 = Causes serious eye damage.
- H400 = Very toxic to aquatic life.
- H226 = Flammable liquid and vapour.
- H411 = Toxic to aquatic life with long lasting effects.
- H317 = May cause an allergic skin reaction.
- H315 = Causes skin irritation.
- H335 = May cause respiratory irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H317 - May cause an allergic skin reaction. Classification procedure: Calculation method

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.