

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

Product code : Hygienfresh Ammorbidente Vanilla Lemon
Trades code : A45-006
Product line: HygienFresh

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

Concentrated DeoAmmorbidente

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:

None

Hazard Class and Category Code(s):

Aquatic Chronic 3

Hazard statement Code(s):

H412 - Harmful to aquatic life with long lasting effects.

The product is dangerous to the environment as it is harmful to aquatic life with long lasting effects

2.2. Label elements

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

Pictogram, Signal Word Code(s):

None

Hazard statement Code(s):

H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):

EUH208 - Contains α -Hexylcinnamaldehyde, dipentene, citral. May produce an allergic reaction.

Precautionary statements:

General

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

P102 - Keep out of reach of children.

Prevention

P273 - Avoid release to the environment.

Disposal

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

Contains:

ethanol, α -Hexylcinnamaldehyde, Hexyl salicylate, Coumarin, (Z)-hex-3-enyl salicylate, (E)-1-methoxy-4-(1-propenyl)benzene, 7-hydroxycitronellal, dipentene, citral
0,00% of the mixture consists of components whose toxicity is unknown.

Contains (Reg.EC 648/2004):

5% < 15% cationic surfactants, < 5% Composti di ammonio quaternario, benzil-C12-16-alchilidimetil, cloruri, Dye, perfumes, α -Hexylcinnamaldehyde, Coumarin, Hydroxy-citronellal, D-Limonene ((S)-p-menta-1,8-diene), Citrale

Content of VOC ready to use condition: 0,95 %

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

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
Fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	> 5 <= 10%	Skin Irrit. 2, H315		91995-81-2	295-334-3	
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	> 0,1 <= 1%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	603-212-00-7	1222-05-5	214-946-9	01-2119488 227-29-000 0
dipentene Note: C	> 0,1 < 1%	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	601-029-00-7	5989-27-5	205-341-0	01-2119529 223-47-000 1
citral	> 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317	605-019-00-3	5392-40-5	226-394-6	01-2119462 829-23-00

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
						01
α -Hexylcinnamaldehyde	> 0,1 < 1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411		101-86-0	202-983-3	
ETHYL TRIMETHYLCYCLOPENTENE BUTENOL - FEMA 0	> 0,1 <= 1%	Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		28219-61-6	248-908-8	
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		68424-85-1	270-325-2	
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one - FEMA 0	<= 0,1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 10 10		1506-02-1	216-133-4	
ethanol	<= 0,1%	Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	

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):

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water for at least 10 minutes.

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 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 gloves and protective clothing Suitable: LaTeX, nitrile, PVC

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:

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

At work do not eat or drink.

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:

dipentene:

TWA: 30 from AIHA

TWA: 165.5 (mg/m³) from AIHA

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: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (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
Not needed for normal use.

(b) Skin protection

(i) Hand protection

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact

Material: nitrile rubber
minimum thickness: 0.11 mm
permeation time: 480 min

(ii) Other

Wear normal work clothing.

(c) Respiratory protection
Not needed for normal use.

(d) Thermal hazards
No hazard to report

Environmental exposure controls:

Related to contained substances:

dipentene:

Do not let this chemical agent contaminate the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	liquid	
Odour	characteristic	
Odour threshold	not determined	
pH	3-3,5	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	>100°C	
Evaporation rate	irrelevant	
Flammability (solid, gas)	irrelevant	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0,9	
Solubility	in water	
Water solubility	not determined	
Partition coefficient: n-octanol/water	not determined	

Physical and chemical properties	Value	Determination method
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: 0,95 %

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 toxicological effects**

ATE(mix) oral = 337.254,9 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Acute Oral Toxicity
(1) Wistar rats (10/sex) were administered commercial grade HHCB (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 5000 mg/kg-bw and observed for 14 days. The corrected dose of HHCB was 3250 mg/kg-bw. One death occurred at this dose.

LD50 > 3250 mg/kg-bw

(2) Rats (10 females/dose; strain not specified) were administered commercial sample (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 3000 mg/kg-bw and observed for 14 days. It is not clear whether the reported dose reflected dose of the mixture or of HHCB. Therefore, a conservative estimate of the LD50 is considered to be 65% of the test concentration. No mortality was observed during the study.

LD50 > 1950 mg/kg-bw

dipentene: LD50 Oral-rat-4.400 mg/kg

Remarks: Behavioral: Change in motor activity (specific assay). Respiratory disorder Skin and Appendages:

Other: Hair. Inhalation: Irritating to respiratory system.

LD50 Dermal-rabbit->5.000 mg/kg

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

(c) serious eye damage/irritation: 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 or 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

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

(f) carcinogenicity: dipentene: Carcinogenicity-rat-Oral

Tumorigenic: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder: Kidney tumors. Tumorigenic Effects: Testicular tumors.

Carcinogenicity-mouse-Oral

Equivocal tumorigenic agent by RTECS criteria: Tumorigenic. Gastrointestinal: Tumors.

This product is or contains a component that is not classifiable as to its carcinogenicity IARC, ACGIH, NTP, based on its or EPA classification.

IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (D-Limonene)

(g) reproductive toxicity: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Mated female Crl:CD(SD)Br rats (animals/sex/dose not specified) were administered HHCB via gavage at 0, 2, 6 or

20 mg/kg-bw/day beginning on gestation day 14. The F1 offspring were exposed in utero and throughout lactation.

At the end of the pre-weaning period, 24 male and 24 female pups per dose were retained for further study. On day

22 post-partum, excess pups and parents were sacrificed and examined for abnormalities. When offspring were 84

days of age, males and females were mated and produced litters. After day 21 post-partum, all F2 pups and F1 dams

were sacrificed and examined internally and externally for abnormalities. No adverse effects on behavior or

reproduction were observed at any dose in parental animals or in F1 or F2 pups.

NOAEL (systemic and reproductive toxicity) = 20 mg/kg-bw/day (based on no effects at the highest dose tested)

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 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Sprague-Dawley rats (15/sex/dose) were administered HHCB via the diet at 0, 5, 15, 50 or 150 mg/kg-bw/day for 13

weeks. Test concentrations were determined from a range finding study in which a LOAEL of 300 mg/kg-bw/day

(based on hepatic effects) was determined. Mean estimated test substance intakes were 5.4, 15.7, 51.8 or 155.8

mg/kg-bw/day for males and 5.1, 15.6, 51.9 or 154.6 mg/kg-bw/day for females. There were no mortalities, adverse

clinical signs or treatment-related effects on body weight, hematology or ophthalmologic evaluation. Slightly lower

mean plasma triglyceride levels were observed at week 13 in males at 50 and 150 mg/kg-bw/day. Slightly lower

plasma glucose concentrations were noted at week 7 in males and females given 15, 50 and 150 mg/kg-bw/day and

at week 13 in males given 50 and 150 mg/kg-bw/day; these effects were not seen at the end of the 4-week recovery period. There were no treatment-related differences in absolute organ weights or organ weight

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

Related to contained substances:

Fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

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

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 13400

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:

LD50 (rat) Oral (mg/kg body weight) = 3250

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3250

dipentene:

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 4400 mg/kg [Rat].

Acute dermal toxicity (LD50): >5000 mg/kg [Rabbit].

Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant, sensitizer), of inhalation (lung irritant).

Slightly hazardous in case of skin contact (permeator), of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects and birth defects (teratogenic)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: Causes skin irritation. It can be absorbed through intact skin. However, it is generally regarded to have low toxicity by dermal route.

Eyes: Causes eye irritation.

Inhalation: Aspiration of large doses may produce pulmonary edema and chemical pneumonitis. May cause dizziness and suffocation. No nasal or pharyngeal irritation has been reported.

Ingestion: It is generally regarded to have low toxicity by oral route. It may produce burning pain in the mouth and throat, abdominal pain, nausea, vomiting, and diarrhea. There may be an odor of terpenes in the vomitus or breath.

It may affect behavior/central nervous and peripheral nervous system. Central nervous system effects may include excitement, somnolence, delirium, ataxia, convulsions, and stupor while peripheral system effects may include spastic paralysis. It may affect respiration (respiratory depression, choking, coughing, dyspnea, cyanosis). Other symptoms may include cyanosis, fever, and tachycardia. Systemic absorption of large doses may produce pulmonary edema and chemical pneumonitis. The urine may smell like violets.

Chronic Potential Health Effects:

Ingestion: Prolonged or repeated ingestion may produce nausea, lowered blood sugar and cholesterol, and kidney damage (hematuria, albuminuria, tubular necrosis), and may also affect the liver.

Skin: It may be a weak sensitizer and responsible for some rare allergic responses (dermatitis)

LD50 (rat) Oral (mg/kg body weight) = 4400

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

citral:

LD50 (rat) Oral (mg/kg body weight) = 4960

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2250

 α -Hexylcinnamaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 2450

ETHYL TRIMETHYLCYCLOPENTENE BUTENOL:

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

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

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

1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one:

LD 50 ORAL / RAT (mg /Kg) : 920

LD50 DERMAL/RAT(mg /Kg) : 7940

LD50 (rat) Oral (mg/kg body weight) = 920

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 7940

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

SECTION 12. Ecological information

12.1. Toxicity

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

Related to contained substances:

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:

21 days Daphnia magna NOEC 111 g/L NOEC 21 days Bluegill sunfish (Lepomis macrochirus) 68 g/L NOEC 35-day early life stage test Fathead minnows (Pimephales promelas) 68 g/L NOEC 72 h Algae (Pseudokirchneriella subcapitata) 201 g/L 8 weeks NOEC Earthworm (Eisenia fetida) 45 g/kg Soil DM 4 weeks Springtails NOEC (Folsomia candida) 45 g/kg Soil DM

C(E)L50 (mg/l) = 0,282

dipentene:

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

C(E)L50 (mg/l) = 0,702

citral:

Oryzias latipes OECD TG 203 LC50 (96 h): 4.1 mg/L

Other Daphnia magna EC50 (72 hours) = 7 mg/L

Selenastrum capricornutum Other EC50 (72hr) = 5 mg/L

C(E)L50 (mg/l) = 4,1

α -Hexylcinnamaldehyde:

C(E)L50 (mg/l) = 0,99

Freshwater Fish Toxicity: acute LC50 >1-10 mg/L

Freshwater Invertebrates Toxicity: acute EC <1 mg/L

Algal Toxicity: acute EC <1 mg/L.

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

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

100

1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one:

Fathead minnow Pimephales promelas LC50 = 0.100

Marine copepod Acartia tonsa 48-h, marine, mortality LC50 = 0.71

C(E)L50 (mg/l) = 0,1 10

10

ethanol:

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

The product is dangerous for the environment as it is toxic for aquatic organisms following acute exposure.

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

12.2. Persistence and degradability

Related to contained substances:

citral:

OECD TG 301 c Readily biodegradable

1/2 T Photodegradation = 1.14 years (direct) T 1/2 = 2.83 hours (indirect)

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

12.3. Bioaccumulative potential

Related to contained substances:

citral:

None

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. 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**

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. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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

Description of the hazard statements exposed to point 3

H315 = Causes skin irritation.

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

H226 = Flammable liquid and vapour.

H317 = May cause an allergic skin reaction.

H411 = Toxic to aquatic life with long lasting effects.

H302 = Harmful if swallowed.

H312 = Harmful in contact with skin.

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

H225 = Highly flammable liquid and vapour.

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.
