

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

1.1. Product identifier

Product code : Hygienfresh Odorblok Essense
Trades code : A32-030
Product line: Hygienfresh

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.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:

GHS05, GHS07

Hazard Class and Category Code(s):

Skin Irrit. 2, Skin Sens. 1, Eye Dam. 1, Aquatic Chronic 3

Hazard statement Code(s):

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

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.

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):
GHS05, GHS07 - Danger



Hazard statement Code(s):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

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

- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

Fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized, Steareth-21, Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, Alcohols, C12-14, ethoxylated, 4-tert-Butylcyclohexyl acetate, 2,6-dimethyloct-7-en-2-ol, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 2-(4-tert-butylbenzyl)propionaldehyde, Hexyl salicylate, 3,7-dimethyloctan-3-ol, 2,2,2-trichloro-1-phenylethylacetate, dipentene, Benzyl salicylate, α -Hexylcinnamaldehyde, Dimethylcyclohex-3-ene-1-carboxaldehyde, Citronellol, 10-Undecenal, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, cineole, Eugenol, 2-Methylundecanal, ETHYL TRIMETHYLCYCLOPENTENE BUTENOL, 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one, Dodecanal, 2,2,6,6,7,8,8-heptamethyl-decahydro-2H-indeno[4,5-b]furan, (\pm) trans-3,3-dimethyl-5-(2,2,3-trimethyl-cyclopent-3-en-1-yl)-pent-4-en-2-ol, 4-methyl-2-(2-methylprop-1-en-1-yl)tetrahydro-2H-pyran, Allyl hex

Contains (Reg.EC 648/2004):

5% < 15% perfumes, < 5% Composti di ammonio quaternario, benzil-C12-16-alchilidimetil, cloruri, cationic surfactants, α -Hexylcinnamaldehyde, Coumarin, ALPHA ISOMETHYLE IONONE, Eugenol, D-Limonene ((S)-p-menta-1,8-diene), Linalool, Benzyl benzoate, 15% < 30% perfumes, < 5% Composti di ammonio quaternario, benzil-C12-16-alchilidimetil, cloruri, non-ionic surfactants, fosfonates, cationic surfactants, BUTYLPHENYL METHYLPROPIONAL, D-Limonene ((S)-p-menta-1,8-diene), Benzyl salicylate, α -Hexylcinnamaldehyde, Citronellol, ALPHA ISOMETHYLE IONONE, Eugenol, Geraniol, Linalool, Geraniol, Linalool, Coumarin, Isoeugenol

Content of VOC ready to use condition: 2,99 %

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
Hexyl salicylate - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		6259-76-3	228-408-6	01-2119638 275-36-000 2
Fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	> 1 <= 5%	Skin Irrit. 2, H315		91995-81-2	295-334-3	
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated - FEMA 0	> 1 <= 5%	Acute Tox. 4, H302; Eye Dam. 1, H318		24938-91-8		
zinc diricinoleate	> 1 <= 5%	Eye Irrit. 2, H319		13040-19-2	235-911-4	
Alcohols, C12-14, ethoxylated	> 1 <= 5%	Eye Dam. 1, H318; Aquatic Acute 1, H400		68439-50-9		
3-methyl-4-(2,6,6-trimethylcyclohe x-2-enyl)but-3-en-2-one - FEMA 2714	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411		127-51-5	204-846-3	
2,6-dimethyloct-7-en-2-ol - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315		18479-58-8	242-362-4	
4-tert-Butylcyclohexyl acetate - FEMA 0	> 1 <= 5%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411		32210-23-4	250-954-9	
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6 ,7,8-octahydronaphthalen-2-yl)eth anone - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411		54464-57-2	259-174-3	
3a,4,5,6,7,7a-hexahydro-4,7-meth ano-1H-indenyl acetate - FEMA 0	> 0,1 <= 1%	Aquatic Chronic 3, H412		54830-99-8	259-367-2	
2-(4-tert-butylbenzyl)propionalde hyde	>= 0,1 <= 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Repr. 2, H361f; Aquatic Chronic 2, H411		80-54-6	201-289-8	01-2119907 954-30-000 0
2-Methylundecanal - FEMA 2749	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic		110-41-8	203-765-0	

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
		Chronic 1, H410				
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	
Benzyl salicylate	<= 0,1%	Eye Irrit. 2, H319; Aquatic Chronic 2, H411		118-58-1	204-262-9	
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):

Take contaminated clothing Immediately off.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the 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 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.

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

- Substance: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m³)

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

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

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
Appearance	Blue liquid	
Odour	characteristic	
Odour threshold	non determinato	
pH	6,5 @ 1%	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	> 100 °C	
Flash point	> 100 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	not determined	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0,950 - 1,050 g/cm ³	
Solubility	completely soluble in water	
Water solubility	not determined	
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: 2,99 %

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 = 18.101,9 mg/kg

ATE(mix) dermal = 904.605,3 mg/kg

ATE(mix) inhal = ∞

(a) acute toxicity: 2,6-dimethyloct-7-en-2-ol: LD50 Oral - rat - 3,600 mg/kg

LD50 Dermal - rabbit - > 5,000 mg/kg

4-tert-Butylcyclohexyl acetate: Rats (10 per dose, sex and strain not reported) were administered

4-tert-butylcyclohexyl acetate by gavage at 5000 mg/kg-bw. No information on mortality was reported

Rabbits (4, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate dermally at 5000 mg/kg-bw.

One rabbit died.

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone: TOXIC DOSE 1-LD > 50 5000 mg/kg (oral rat)

TOXIC DOSE 2-LD > 50 5000 mg/kg (skn-rbt)

2-(4-tert-butylbenzyl)propionaldehyde: Oral Rat LD50 mg/kg 3.700

Skin Rabbit > 2.000 mg/kg LD50

Benzyl salicylate: Oral Rat LD50 = 2227 mg/kg bw

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/irritationIf brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

2,6-dimethyloct-7-en-2-ol: Skin - rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

4-tert-Butylcyclohexyl acetate: Rabbits (species, sex and number not specified) were administered 4-tert-butylcyclohexyl acetate dermally to the ears and backs. Observations of the backs included slight erythema after 1 and 5 min, severe erythema and slight edema at 15 min, and severe erythema and edema at 20 hours. On day 8, slight redness and severe scaling were observed. Observations of the ears included severe erythema and edema with blistering after 20 hours. Severe necrosis was recorded on day 8. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit skin

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Method: DOT Corrosive Exposure time: 12:0 am

Benzyl salicylate: Skin - rabbit

Result: No skin irritation

(OECD Test Guideline 404)

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

(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)

2,6-dimethyloct-7-en-2-ol: Eyes - rabbit

Result: Moderate eye irritation

(Draize Test)

4-tert-Butylcyclohexyl acetate: Albino rabbits (3/sex dose not specified) were instilled 0.1 mL aliquot of 0.625% solution (vehicle not reported) into the right eye of each rabbit with no further treatment while the left eye served as control. Scores were recorded according to the Draize scale. Slight to moderate irritation with conjunctival chemosis and discharge were observed in all three rabbits (mean score for redness and 1.9 for 1 chemosis). All eyes cleared by day 4. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit eyes.

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

Benzyl salicylate: Eyes - In vitro study

Result: Moderate eye irritation

(OECD Test Guideline 437)

Eyes - rabbit

Result: Irritating to eyes.

(Draize Test)

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

2,6-dimethyloct-7-en-2-ol: Maximisation Test

Did not cause sensitisation on laboratory anima

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: 4-tert-Butylcyclohexyl acetate: Salmonella typhimurium strains TA98, TA100, TA1535, TA1537 and Ta 1538 were exposed to 4-tert-butylcyclohexyl acetate at 8 to 5000 g/plate in a bacterial reverse mutation assay in the presence and absence of metabolic activation. Positive and negative controls were used but their response was not provided. Cytotoxicity was observed at and above 200 g/plate.

4-tert-Butylcyclohexyl acetate was not mutagenic in this assay.

(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 4-tert-Butylcyclohexyl acetate: In a modified developmental toxicity screening test (OCED TG 421), CrI: CD pregnant (SD) rats were administered 4-tert-butylcyclohexyl acetate (a mixture of 71% 28% trans and cis) in corn oil by gavage at 0, 40, 160 or 640 mg/kg-bw per day during gestation days 7 20. Rats were Caesarean-sectioned on day 21 of gestation and examined for number and distribution of corpora lutea, implantation sites and placenta. Live and dead fetuses and early and late resorptions were recorded. Fetuses were

examined for sex ratio, gross external alterations and skeletal and soft tissue alterations. There were no effects on maternal body weights, weight gain, food consumption or organ weights. Pup viability, body weights, external observations and microscopic examination showed no significant alterations that could be related to the administration of the test substance.

NOAEL (maternal or developmental toxicity) = 640 mg/kg-bw/day (based on no effects at the highest dose tested)

(j) aspiration hazard: Benzyl salicylate: in vivo assay - mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

Related to contained substances:

Hexyl salicylate:

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

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

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

Alcohols, C12-14, ethoxylated:

Oral > LD50 2000 mg/kg (rat)

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

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

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,6

3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one:

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

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

2,6-dimethyloct-7-en-2-ol:

Skin - rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

Eyes - rabbit

Result: Moderate eye irritation

(Draize Test)

Oral LD50 (rat) : 3600 mg/kg

Dermal LD50 (rabbit) >5000 mg/kg

LD50 (rat) Oral (mg/kg body weight) = 3600

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

4-tert-Butylcyclohexyl acetate:

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

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

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:

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

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

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate:

Acute oral toxicity : Acute toxicity estimate Dose: 2,750 mg/kg Method: Calculation method

Acute oral toxicity (Component) : LD50 rat Dose: 2,750 mg/kg Method: OECD Test Guideline 401 Remarks: IFF

Acute dermal toxicity LD50 rat Dose: > 5,000 mg/kg Method: OECD Test Guideline 402

LD50 (rat) Oral (mg/kg body weight) = 2750

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

2-(4-tert-butylbenzyl)propionaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 3700

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

2-Methylundecanal:

LD50 Oral - rat -> 5.000 mg / kg
DL50 Dermal - rabbit -> 10,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

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

Benzyl salicylate:

LD50 (rat) Oral (mg/kg body weight) = 2227

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

SECTION 12. Ecological information

12.1. Toxicity

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

Related to contained substances:

Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated:

Acute toxicity to fish

LC50 - 96 h : 7.5 mg/l - *Lepomis macrochirus* (Bluegill sunfish)

Harmful to fish.

LC50 - 96 h : 12 mg/l - *Danio rerio* (zebra fish)

Method: OECD Test Guideline 203

Harmful to fish.

Acute toxicity to daphnia and other aquatic invertebrates.

Tridecyl alcohol ethoxylated : LC50 - 48 h : 4.7 mg/l - *Daphnia magna* (Water flea)

Method: OECD Test Guideline 202

Toxic to aquatic invertebrates.

Toxicity to aquatic plants

Tridecyl alcohol ethoxylated : ErC50 - 72 h : 17 mg/l - *Scenedesmus subspicatus*

Harmful to algae.

C(E)L50 (mg/l) = 4,7

Alcohols, C12-14, ethoxylated:

EC50 < 1 mg/l (Literaturwert)

NOEC/21 d 0.77 mg/l (Daphnia magna)

C(E)L50 (mg/l) = 0,19

3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one:

Rainbow Trout (average length, 5.8 cm), acclimatized for 12 days, were exposed to a series of 5 test concentrations of 0, 7.8, 10.9, 15.3, 21.4, or 30 mg/L dispersed in Polysorbate 80 (10 mg/L) for 96 hours at 17.1 °C. Control fish were exposed to Polysorbate 80 (10 mg/L). Fish were observed twice daily for mortality and symptoms. pH values and water temperature were monitored after substance addition at 24 hour intervals. Dissolved oxygen was measured at the beginning of the experiment and at 96 hours.

LC50 = 10.9 mg/L

Daphnia magna 48h - LC50 = 0.597 mg/L

72 hr EC50=7.47 mg/L based on average specific growth rate;

C(E)L50 (mg/l) = 0,597

2,6-dimethyloct-7-en-2-ol:

96 Hour LC50 = 4.81 mg/l EPA ECOSAR

Daphnia magna 48 hrs LC50 = 5.70 mg

Green algae 96 hr NOEC, LOEC or NOEL, LOEL EC50 = 3.88 mg/l

C(E)L50 (mg/l) = 4,81

4-tert-Butylcyclohexyl acetate:

Golden ide (*Leuciscus idus*) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 0, 10, 13, 16 and 20 mg/L under static conditions for 48 hours. EF Marlowet was used as a solubilizer. Mortality was 0, 10, 100 and 80% at 10, 13, 16 and 20 mg/L.

48-h LC50 = 14 mg/L

Water fleas (*Daphnia magna*) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 2.8 to 28.4 mg/L (measured concentrations, 2.4 to 28.4 mg/L) under static conditions for 48 hours.

48-h EC50 = 23.4 mg/L

C(E)L50 (mg/l) = 14

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:

Endpoint: LC50 species: *Iepomismacrochirus* (fish-salt Bluegrill) = 1.30 mg/l-h Duration: 96-Note:: method: OECD 203 TG

Endpoint: EC50-species: *Daphnia magna* (Water flea) = 1.38 mg/l-h Duration: 48-comments:: semi-static test method: OECD TG 202

Endpoint: EC50 *Desmodesmus subspicatus*-species (green algae) = 2.60 mg/l-h Duration: 72-Note:: static test method: OECD TG201

C(E)L50 (mg/l) = 1,3

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate:

Toxicity to fish: flow-through test LC50 Species: *Danio rerio* (zebra fish) Dose: 15.8 mg/l

Exposure time: 96 h Method: Directive 67/548/EEC, Annex V, C.1.

Toxicity to daphnia and other aquatic invertebrates.: static test EC50

Species: *Daphnia magna* (Water flea) Dose: 25 mg/l Exposure time: 48 h Method: OECD Test Guideline 202

Toxicity to algae: static test EC50 Species: *Desmodesmus subspicatus* (green algae)

Dose: 25 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

C(E)L50 (mg/l) = 15,8

2-(4-tert-butylbenzyl)propionaldehyde:
Daphnia magna 48 hrs-LC50 = 0.40 mg/l
Green algae 96 hrs-EC50 = 0.827 mg/l
C(E)L50 (mg/l) = 0,4

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:
C(E)L50 (mg/l) = 0,01 100
100

Benzyl salicylate:
Zebra fish (Brachydanio rerio) 96 hour LC50 = 1.03 mg/L
48 hour LC50 = 1.4mg/l
C(E)L50 (mg/l) = 1,03

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:
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated:
The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability

2,6-dimethyloct-7-en-2-ol:
72% within 28 days in an OECD 301B assay

2-(4-tert-butylbenzyl)propionaldehyde:
92% "biodegradation after 28 days. 96% after day 31.

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

No data available.

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:
HP4 - Irritant — skin irritation and eye damage
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.
- H317 = May cause an allergic skin reaction.
- H319 = Causes serious eye irritation.
- H400 = Very toxic to aquatic life.
- H410 = Very toxic to aquatic life with long lasting effects.
- H302 = Harmful if swallowed.
- H318 = Causes serious eye damage.
- H411 = Toxic to aquatic life with long lasting effects.
- H412 = Harmful to aquatic life with long lasting effects.
- H361f = Suspected of damaging fertility.
- H312 = Harmful in contact with skin.
- H314 = Causes severe skin burns and 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.
