

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

1.1. Product identifier

Product code : Bustine profumate Fiori Bianchi
Trades code : A80-035/1
Product line: Hygienfresh

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

Envelope scented with Hook-perfume long lasting for cabinets and drawers

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:

GHS07, GHS09

Hazard Class and Category Code(s):

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

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

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

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

2.2. Label elements

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

Pictogram, Signal Word Code(s):
GHS07, GHS09 - Warning



Hazard statement Code(s):
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic 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.

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.

Disposal

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

Contains:

Benzyl salicylate, α -Hexylcinnamaldehyde, benzyl benzoate, [3R-(3 α ,3 β ,7 β ,8 α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one, Linalool, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 2-(4-tert-butylbenzyl)propionaldehyde, Coumarin, 7-hydroxycitronellal, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde, Isoeugenol

Content of VOC ready to use condition: 3,50 %

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
Benzyl salicylate	> 20 <= 30%	Eye Irrit. 2, H319; Aquatic Chronic 2, H411		118-58-1	204-262-9	
α -Hexylcinnamaldehyde	> 10 <= 20%	Skin Sens. 1, H317; Aquatic Chronic 2, H411		101-86-0	202-983-3	

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
benzyl benzoate	> 1 <= 5%	Acute Tox. 4, H302; Aquatic Chronic 2, H411	607-085-00-9	120-51-4	204-402-9	
benzyl acetate - FEMA 2135	> 1 <= 5%	Aquatic Chronic 3, H412		140-11-4	205-399-7	
[3R-(3 α ,3 β ,7 β ,8 α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one - FEMA 0	> 1 <= 5%	Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		32388-55-9	251-020-30	
2-phenylethanol - FEMA 2858	> 1 <= 5%	Eye Irrit. 2, H319		60-12-8	200-456-2	
methyl anthranilate - FEMA 2682	> 1 <= 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		134-20-3	205-132-4	
Linalool	> 1 <= 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		78-70-6	201-134-4	01-2119485 965-18-xxxx x
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411		54464-57-2	259-174-3	
1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one - FEMA 0	> 0,1 <= 1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 10 10		1506-02-1	216-133-4	
2-(4-tert-butylbenzyl)propionaldehyde	>= 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
Coumarin	> 0,1 <= 1%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373		91-64-5	202-086-7	01-2119943 756-26-000 0
2,6-di-tert-butyl-p-cresol - FEMA 2184	> 0,1 <= 1%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410		128-37-0	204-881-4	01-2119565 113-46
7-hydroxycitronellal	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; Eye Irrit. 2, H319		107-75-5		
1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	> 0,1 <= 1%	Skin Corr. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411		68155-67-9	268-979-9	
1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410		68155-66-8	268-978-3	01-2119489 989-04-000 0
4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde	> 0,1 <= 1%	Skin Sens. 1A, H317	605-040-00-8	31906-04-4	250-863-4	
Isoeugenol	> 0,1 <= 1%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319		97-54-1	202-590-7	

Fractionated global values

H411	= 52,50	H319	= 32,20	H317	= 27,50	H302	= 7,70
H412	= 4,00	H400	= 4,50	H410	= 4,90	H315	= 6,95
H335	= 2,00	H361f	= 0,80	H373	= 0,70	H318	= 0,50
H312	= 0,30	H311	= 0,00	H301	= 0,00	H314	= 0,00
H226	= 0,00	H332	= 0,00				

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

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 eye irritation persists: 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 a mask, gloves and protective clothing. Suitable: LaTeX, nitrile, PVC
Delete all naked flames and potential sources of ignition. Do not smoke.
Provide adequate ventilation.
Evacuate danger area and, where appropriate, consult an expert.

6.2. Environmental precautions

Contain spill
Inform the competent 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 the removal.

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

At work do not eat or drink.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
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

There are no data on occupational exposure limits

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
Not needed for normal use.

(b) Skin protection

(i) Hand protection
When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

(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:
benzyl benzoate:
DO NOT drain to drain.



SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
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Physical and chemical properties	Value	Determination method
Appearance	Perfumed sachet	
Odour	characteristic	
Odour threshold	not determined	
pH	irrelevant	
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)	irrelevant	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	irrelevant	
Vapour density	not determined	
Relative density	irrelevant	
Solubility	not determined	
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: 3,50 %

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

None in particular.

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 = 15.300,3 mg/kg
ATE(mix) dermal = 366.666,7 mg/kg
ATE(mix) inhal = ∞

(a) acute toxicity: Benzyl salicylate: Oral Rat LD50 = 2227 mg/kg bw
α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one: LD50
rat Dose: > 5.000 mg/kg
LD50 rabbit Dose: > 5.000 mg/kg
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
2,6-di-tert-butyl-p-cresol: LD50 oral: 1700 mg/kg (rat)
LD50 oral: 800 - 1600 mg/kg (mouse)
LD50 dermal: >8000 mg/kg (guinea pig)
(b) skin corrosion/irritation Benzyl salicylate: Skin - rabbit
Result: No skin irritation
(OECD Test Guideline 404)
benzyl acetate: Skin-rabbit-skin irritant-24 h
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one: rabbit
Result: Skin irritation
Exposure time: 12:0 am
(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may
last for more than 24 hours.
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.
[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one:
Maximisation study human
Result: Did not cause sensitization on laboratory animals.
Test substance: 30% in petrolatum

Coumarin: Test: Inhalation Sensitization Route: Inhalation Species: Rat = 293 mg/kg
Test: Inhalation Sensitization Route: Inhalation Species: Mouse = 196 mg/kg

(e) germ cell mutagenicity: benzyl acetate: Laboratory tests revealed mutagenic effects.
Genotoxicity in vitro lymphocyte-topo-
mutation in mammalian somatic cells
In vitro genotoxicity-Hamster-Lungs
Cytogenetic analysis

(f) carcinogenicity: benzyl acetate: Cancerogenicit-rat-Oral

Oncogenia: second neoplastic RTECS gastrointestinal tumors

Cancerogenicit-rat-Oral

Oncogenia: Liver cancer second neoplastic RTECS:

This product or contains a component that cannot be classified according to its effect carcinogen IARC classification, ACGIH, NTP or EPA.

IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (Benzyl acetate)

(g) reproductive toxicity: based on available data, the classification criteria are not met.

(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: Benzyl salicylate: in vivo assay - mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

Related to contained substances:

Benzyl salicylate:

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

α -Hexylcinnamaldehyde:

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

benzyl benzoate:

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its aerosols through the skin and by ingestion.

INHALATION RISK: No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20 ° C.

EFFECTS OF SHORT-TERM EXPOSURE: The substance is irritating to the eyes, the skin and the respiratory tract.

EFFECTS OF REPEATED OR LONG-TERM EXPOSURE: Repeated or prolonged contact with the skin may cause dermatitis.

ACUTE RISKS / SYMPTOMS

INHALATION Cough. Sore throat.

SKIN CAN BE ABSORBED! Dry skin. Redness.

EYES Redness.

LD50 (rat) Oral (mg/kg body weight) = 1680

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 4000

benzyl acetate:

Oral LD50-rat-2,490 mg/kg

Observations: behavior: somnolence (General depressed activity)

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

Acute toxicity of the vapor (LC50): 245 8 hours

LD50 (rat) Oral (mg/kg body weight) = 2490

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

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 245

[3R-(3 α ,3 β ,7 β ,8 α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one:

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

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

2-phenylethanol:

LD50 (rat) Oral (mg/kg body weight) = 1790

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 806

methyl anthranilate:

LD50 Oral - rat - 2.910 mg / kg

Remarks: Behavior: drowsiness (generic depressive activity) Behavior: coma

LD50 Dermal - on rabbit -> 5.000 mg / kg

LD50 (rat) Oral (mg/kg body weight) = 2910
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Linalool:

LD50 (rat) Oral (mg/kg body weight) = 2790
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5610
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 307

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

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

2-(4-tert-butylbenzyl)propionaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 3700
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Coumarin:

Acute oral LD50 for rats: 293mg/kg
Acute oral LD50 for mice: 196mg/kg
Irritant data: Not determined
Inhalation data: Not determined
Mutagenicity data: Not determined
LD50 (rat) Oral (mg/kg body weight) = 293
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 242

2,6-di-tert-butyl-p-cresol:

LD50 (rat) Oral (mg/kg body weight) = 1700
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 8000

7-hydroxycitronellal:

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

1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one:

Acute oral toxicity
LD50 rat
Dose: > 5,000 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) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde:

Oral LD50-rat-3,227 mg/kg
Remark: sense organs: sight: tearing behavior: somnolence (depressive activity generic) behavior: tremors
Dermal LD50 rabbit-11,221-mg/kg
Observations: behavior: somnolence (General depressed activity) gastrointestinal: structural alterations or salivary gland function

Isoeugenol:
LD50 (rat) Oral (mg/kg body weight) = 1560

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

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

α -Hexylcinnamaldehyde:
Freshwater Fish Toxicity: acute LC50 >1-10 mg/L
Freshwater Invertebrates Toxicity: acute EC <1 mg/L
Algal Toxicity: acute EC <1 mg/L.
C(E)L50 (mg/l) = 0,99

benzyl benzoate:
During normal use this substance is released into the environment. However, great care must be taken to prevent any additional release, for example for inappropriate disposal.
C(E)L50 (mg/l) = 2,32

benzyl acetate:
Toxicity to fish Lc50-*Oryzias latipes*-4 mg/l-96 h
C(E)L50 (mg/l) = 4

methyl anthranilate:
Toxicity to fish
LC50 - *Lepomis macrochirus* - 9.12 mg / l - 96 h
NOEC mortality - *Oncorhynchus mykiss* (rainbow trout) - 5 mg / l - 96 h

Toxicity to daphnia and other aquatic invertebrates
EC50 - *Daphnia magna* (Large water flea) - 18.2 mg / l - 48 h
C(E)L50 (mg/l) = 9,12
NOEC (mg/l) = 5

Linalool:
Fish: 96h LC50:39 mg/L (*Oryzias latipes*)
Crustacea: 48h EC50:52 mg/L (*Daphnia magna*)
Algae: 72h EC50:28 mg/L (*Selenastrum capricornutum*)
C(E)L50 (mg/l) = 27,799999

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:
Endpoint: LC50 species: *lepomis macrochirus* (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

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

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

Coumarin:
Toxicity to fish LC50 - *Poecilia reticulata* (guppy) - 56 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates LC50 - *Daphnia magna* (Water flea) - 3.5 mg/l - 48 h
C(E)L50 (mg/l) = 13,5

2,6-di-tert-butyl-p-cresol:
Toxicity to fish LC50 - *Oryzias latipes* - 5.3 mg/l - 48 h
Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia pulex* (Water flea) - 1.44 mg/l - 48 h
C(E)L50 (mg/l) = 1,44

1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one:
Toxicity to fish:
semi-static test LC50
Species: *Lepomis macrochirus* (Bluegill sunfish)
Dose: 1.3 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates.:
semi-static test EC50
Species: *Daphnia magna* (Water flea)
Dose: 1.38 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
IFF

C(E)L50 (mg/l) = 1,3
NOEC (mg/l) = 100

The product is dangerous for the environment as it is toxic to 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:

Linalool:
90 % (by BOD), 99 % (by TOC), 100 % (by GC)

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

Coumarin:
100% (by BOD), 100% (by TOC), 99.6% (by GC)

12.3. Bioaccumulative potential

Related to contained substances:

Linalool:
106

Coumarin:
6.7

12.4. Mobility in soil

Related to contained substances:

Linalool:
log Pow: 2.55
Soil adsorption (Koc): 75
Henry's Law constant(PaM3/mol): 2

Coumarin:
log Pow: 1.39
Soil adsorption (Koc): No data available
Henry's Law constant(PaM3/mol): 0.7

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

ADR/RID/IMDG/ICAO-IATA: 3077

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 5 kg per package 30 Kg

Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 kg per package 20 Kg



14.2. UN proper shipping name

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, SOLIDA, N.A.S. (Salicilato di benzile, α -Hexylcinnamaldehyde, benzile benzoato, acetato di benzile, ACETYLCEDRENE, 1',2',3',4',5',6',7',8'-ottaidro-2',3',8',8'-tetrametil-2'-acetonaftone, 1-(5,6,7,8-tetraidro-3,5,5,6,8,8-esametil-2-naftil)etan-1-one, 2-(4-terz-butilbenzil)propionaldeide, Coumarin, 2,6-di-terz-butyl-p-cresolo, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, eptan-2-one)

ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benzyl salicylate, α -Hexylcinnamaldehyde, benzyl benzoate, benzyl acetate, [3R-(3 α ,3 $\alpha\beta$,7 β ,8 $\alpha\alpha$)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one, 2-(4-tert-butylbenzil)propionaldehyde, Coumarin, 2,6-di-tert-butyl-p-cresol, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,5,6,7,8,8a-octah)

ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benzyl salicylate, α -Hexylcinnamaldehyde, benzyl benzoate, benzyl acetate, [3R-(3 α ,3 $\alpha\beta$,7 β ,8 $\alpha\alpha$)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one, 2-(4-tert-butylbenzil)propionaldehyde, Coumarin, 2,6-di-tert-butyl-p-cresol, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,5,6,7,8,8a-octah)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 9
ADR/RID/IMDG/ICAO-IATA: Label : Limited quantities
ADR: Tunnel restriction code : --
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 kg
IMDG - EmS : F-A, S-F

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous
IMDG: Marine polluting agent : Yes

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

Seveso category:
E2 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:
HP4 - Irritant — skin irritation and eye damage

HP13 - Sensitising
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

- H319 = Causes serious eye irritation.
- H411 = Toxic to aquatic life with long lasting effects.
- H317 = May cause an allergic skin reaction.
- H302 = Harmful if swallowed.
- H412 = Harmful to aquatic life with long lasting effects.
- H400 = Very toxic to aquatic life.
- H410 = Very toxic to aquatic life with long lasting effects.
- H315 = Causes skin irritation.
- H335 = May cause respiratory irritation.
- H361f = Suspected of damaging fertility.
- H373 = May cause damage to organs through prolonged or repeated exposure .
- H318 = Causes serious eye damage.
- H312 = Harmful in contact with skin.

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.