

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

### **1.1. Product identifier**

Product code : Hygienfresh Essenza Muschio Bianco  
Trades code : A48-030  
Product line: Hygienfresh

UFI: QU81-T04T-V007-KTYU

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

Perfumed essence for washing in water and for washing with perchlorine

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](mailto:info@tintolav.com) - Sito internet: [www.tintolav.com](http://www.tintolav.com)

Email tecnico competente: [a.conedera@tintolav.com](mailto: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, GHS09

Hazard Class and Category Code(s):

Acute Tox. 4, Skin Sens. 1A, Eye Dam. 1, Aquatic Chronic 2

Hazard statement Code(s):

H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H411 - Toxic to aquatic life with long lasting effects.

Harmful product: do not ingest

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 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):  
GHS05, GHS07, GHS09 - Danger

Hazard statement Code(s):  
H302 - Harmful if swallowed.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
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

- P261 - Avoid breathing vapours.
- P264 - Wash your hand thoroughly after handling.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- 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:

parfum, trideceth-12, ricinus communis oil, ethoxydiglycol, Benzyl salicylate, Linalool, alpha isomethyl ionone, Coumarin, Reaction mass of 2-methylbutyl salicylate and pentyl salicylate, phenethyl alcohol, Citronellol, Hexyl cinnamal, 3-(p-cumenyl)-2-methylpropionaldehyde, Geraniol, Isoeugenol, beta-Caryophyllene, Eugenol, Benzyl benzoate, Benzyl alcohol.

Contains (Reg.EC 648/2004):

> 30% perfumes, 15% < 30% non-ionic surfactants, < 5% Benzyl salicylate, Linalool, ALPHA ISOMETHYLE IONONE, Coumarin, Citronellol, a-Hexylcinnamaldehyde, Geraniol, Isoeugenol, Eugenol, Benzyl alcohol, Benzyl benzoate

Packaging to be fitted with a tactile warning

Content of VOC ready to use condition: 25,84 %

UFI: QU81-T04T-V007-KTYU

## 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[w/w]	Classification	Index	CAS	EINECS	REACH
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated - FEMA 0	>= 25 < 35%	Acute Tox. 4, H302; Eye Dam. 1, H318	ND	24938-91-8	ND	NR
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 5 < 15%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ATE oral = 3.250,0 mg/kg ATE dermal = 3.250,0 mg/kg	603-212-00-7	1222-05-5	214-946-9	01-2119488 227-29-000 0
Benzyl salicylate	>= 1 < 5%	Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 1 1 ATE oral = 2.227,0 mg/kg	607-754-00-5	118-58-1	204-262-9	01-2119969 442-31
Linalool	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,0 mg/kg ATE dermal = 5.610,0 mg/kg ATE inhal = 307,0mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474 016-42-000 0
3-methyl-4-(2,6,6-trimethylcyclohex-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 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	127-51-5	204-846-3	NR
Coumarin	>= 1 < 5%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373 ATE oral = 293,0 mg/kg ATE dermal = 242,0 mg/kg	ND	91-64-5	202-086-7	01-2119943 756-26-000 0
Citronellol	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,0	ND	106-22-9	203-375-0	01-2119453 995-23-000 0

In conformity to Regulation (EU) 2020/878

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
		mg/kg ATE dermal = 2.650,0 mg/kg ATE inhal = 1,3mg/l/4 h				
Reaction mass of 2-methylbutyl salicylate and pentyl salicylate	>= 0,1 < 1%	Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 2.000,0 mg/kg	ND	ND	911-280-7	01-2119969 444-27-000 2
$\alpha$ -Hexylcinnamaldehyde	>= 0,1 < 1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,0 mg/kg	ND	101-86-0	202-983-3	01-2119533 092-50
Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317 ATE oral = 10.000,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	5502-75-0	939-719-8	01-2119983 532-32-xxx
3-(4-isobutylphenyl)-2-methylprop anal - FEMA 0	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Repr. 2, H361 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	6658-48-6	229-695-0	NR
Geraniol - FEMA 2507	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318 ATE oral = 3.500,0 mg/kg ATE dermal = 5.000,0 mg/kg ATE inhal = 0,5mg/l/4 h	603-241-00-5	106-24-1	203-377-1	01-2119552 430-49-000 0
Isoeugenol	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319 Limits: Skin Sens. 1A, H317 %C >=0,01;	604-094-00-X	97-54-1	202-590-7	NR
Eugenol	>= 0,1 < 1%	Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.000,0 mg/kg	ND	97-53-0	202-589-1	01-2119971 802-33-000 0
beta-Caryophyllene - FEMA 2252	>= 0,1 < 1%	Asp. Tox. 1, H304; Skin Sens. 1B, H317; Aquatic Chronic 4, H413 1 1 ATE oral = 5.000,0 mg/kg	ND	87-44-5	201-746-1	NR

## **SECTION 4. First aid measures**

### **4.1. Description of first aid measures**

#### Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated room.  
**CALL A PHYSICIAN.**

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.

If breathing has stopped, give artificial respiration.

#### Direct contact with skin (of the pure product):

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

#### Direct contact with eyes (of the pure product):

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

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

#### Ingestion:

The product is harmful and can cause irreversible damages even following a single exposure if swallowed.  
Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

### **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 SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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, CO<sub>2</sub>, 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**

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### **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. 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:

Rapidly recover the product, wear a mask and protective clothing  
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.  
Prevent it from entering the sewer system.

#### 6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

#### 6.3.3 Other information:

None in particular.

### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors  
Wear protective gloves/protective clothing/eye protection/face protection.  
In residential areas do not use on large surfaces.  
At work do not eat or drink.  
Do not eat, drink or smoke when using this product.  
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

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

DNEL

Systemic effects Long term Workers inhalation = 22 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 60 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 6,5 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 36 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 3,8 (mg/kg bw/day)

PNEC

Sweet water = 0,0044 (mg/l)

sediment Sweet water = 2 (mg/kg/sediment)

Sea water = 0,00044 (mg/l)

sediment Sea water = 0,394 (mg/kg/sediment)

ground = 0,31 (mg/kg ground)

- Substance: Linalool

DNEL

Systemic effects Long term Workers inhalation = 2,8 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 0,7 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: Citronellol

DNEL

Systemic effects Long term Workers inhalation = 161,6 (mg/m<sup>3</sup>)

- Substance:  $\alpha$ -Hexylcinnamaldehyde

DNEL

Systemic effects Long term Workers inhalation = 0,000078 (mg/m<sup>3</sup>)

Systemic effects Short term Workers inhalation = 0,00628 (mg/m<sup>3</sup>)

PNEC

Sweet water = 0,03 (mg/l)

sediment Sweet water = 47,7 (mg/kg/sediment)

Sea water = 0,003 (mg/l)

sediment Sea water = 4,77 (mg/kg/sediment)

ground = 9,51 (mg/kg ground)

- Substance: Geraniol

DNEL

Systemic effects Long term Workers inhalation = 161,6 (mg/m<sup>3</sup>)

### 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

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
Physical state	Liquid	
Colour	straw yellow	
Odour	characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	irrelevant	

Physical and chemical properties	Value	Determination method
Flammability	nonflammable	
Lower and upper explosion limit	not determined	
Flash point	> 60 °C	ASTM D92
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	not determined	
Kinematic viscosity	not determined	
Solubility	irrelevant	
Water solubility	Completely soluble in water	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	0,980 - 1,020 g /cm <sup>3</sup>	
Relative vapour density	not determined	
Particle characteristics		

### 9.2. Other information

Content of VOC ready to use condition: 25,84 %

#### 9.2.1 Information with regard to physical hazard classes

#### 9.2.2 Other safety characteristics

## 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 ignite in contact with oxidants mineral acids.

### 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 = 1.577,7 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: Harmful product: do not ingest

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

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

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

ihl-rat LCLo:1.3 mg/m<sup>3</sup>/4H

α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg

Geraniol: LD50 Oral (rat) (mg / kg body weight) = 3500

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

LC50 Inhalation (rat) of vapor / dust / aerosol / smoke (mg / l / 4h): 0.5

(b) skin corrosion/irritation: Benzyl salicylate: Skin - rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Citronellol: skn-rbt 100 mg/24H SEV

Skin - Human - Skin irritation - 48 h

Geraniol: skn-rbt 100 mg/24H SEV

skn-gpg 100 mg/24H SEV

skn-man 16 mg/24H SEV

(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.

Geraniol: Eyes-rabbit

Result: Risk of serious damage to eyes. -12:00 am

(Directive 67/548/EEC, Annex V, b. 5.)

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.

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

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

Citronellol: mouse - May cause sensitization by skin contact.

Geraniol: Guinea pig

May cause sensitisation by skin contact.

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

(f) carcinogenicity: Geraniol: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

(g) eproductivetoxicity: 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)

(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: Benzyl salicylate: in vivo assay - mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

Related to contained substances:

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

Benzyl salicylate:

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

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

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

Coumarin:

Acute oral LD50 for rats: 293mg/kg

Acute oral LD50 for mice: 196mg/kg

Irritant date: 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

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

Reaction mass of 2-methylbutyl salicylate and pentyl salicylate:

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

$\alpha$ -Hexylcinnamaldehyde:

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

Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol:

LD50 (rat) Oral (mg/kg body weight) = 10000

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

3-(4-isobutylphenyl)-2-methylpropanal:

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

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

Geraniol:

LD50 (rat) Oral (mg/kg body weight) = 3500

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

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,5

Eugenol:

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

beta-Caryophyllene:

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

## 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

### 12.1. Toxicity

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

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

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

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

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

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

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

$\alpha$ -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

Reaction Mass of Cis-4-(isopropyl) cyclohexanemethanol and Trans-4-(isopropyl) cyclohexanemethanol:

The substance was toxic to *Oncorhynchus mykiss* when tested according to OECD 203. The 96 hr LC50 for was reported to be 4.2 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was harmful to *Daphnia magna* when tested according to OECD 202. The 48 hr EC50 for was reported

to be 13 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was toxic to aquatic algae when tested according to OECD 201. The 72 hr EC50 based on growth rate was reported to be 10 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal). The 72h EC10 based on growth rate was reported to be 5.2 mg/L (based on nominal concentrations, measured concentrations were >80% to nominal).

The substance was not acutely toxic to microorganisms when tested according to OECD 209. The 3 hr EC50 for activated sludge respiration inhibition was reported to be 190 mg/L (nominal).  
C(E)L50 (mg/l) = 4,2

3-(4-isobutylphenyl)-2-methylpropanal:  
C(E)L50 (mg/l) = 3,02

Geraniol:  
static test LC50-zebrafish (zebra fish)-ca. 22 mg/l-96 h (OECD Test Guideline 203)  
Broadcast application EC50-Daphnia magna (Water flea)-10.8 mg/l-48 h (OECD Test Guideline 202)  
Growth inhibition EC50-Desmodesmus subspicatus (green algae)-13.1 mg/l-72 h  
C(E)L50 (mg/l) = 10,8

Eugenol:  
Toxicity to fish Lc50-Danio rerio (zebrafish)-13 mg/l-96 h (OECD TEST GUIDELINE 203) Toxicity to daphnia and other aquatic invertebrates – Daphnia Ec50-1.13 mg/l-48 h  
C(E)L50 (mg/l) = 1,13

beta-Caryophyllene:  
C(E)L50 (mg/l) = 0,17

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

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

Geraniol:  
Aerobic chemical oxygen demand:  
Exposure time 3 days  
Result: 80 - 100% - Easily biodegradable.  
(OECD Test Guideline 301A)

## 12.3. Bioaccumulative potential

Related to contained substances:  
Linalool:  
106

Coumarin:  
Bioaccumulation Leuciscus idus melanotus - 3 d -46 µg/l  
Bioconcentration factor (BCF): < 10

#### **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

Geraniol:

log Pow: 3.47

#### **12.5. Results of PBT and vPvB assessment**

No PBT/vPvB ingredient is present

#### **12.6. Endocrine disrupting properties**

No data available.

#### **12.7. Other adverse effects**

No adverse effects

### **SECTION 13. Disposal considerations**

#### **13.1. Waste treatment methods**

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

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

### **SECTION 14. Transport information**

#### **14.1. UN number or ID number**

ADR/RID/IMDG/ICAO-IATA: 3082

ADR exemption because compliance with the following characteristics:

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

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

#### **14.2. UN proper shipping name**

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, LIQUIDA, N.A.S.

(1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, Salicilato di benzile,

3-metil-4-(2,6,6-trimetilcicloes-2-enil)but-3-en-2-one, Coumarin, α-Hexylcinnamaldehyde, 4-Methoxytoluene, Dodecanal, p-mentha-1,4(8)-diene)

ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, Benzyl salicylate,

3-methyl-4-(2,6,6-trimethylcyclohex-2-enil)but-3-en-2-one, Coumarin, α-Hexylcinnamaldehyde, 4-Methoxytoluene,

Dodecanal, p-mentha-1,4(8)-diene)  
ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, Benzyl salicylate,  
3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, Coumarin,  $\alpha$ -Hexylcinnamaldehyde, 4-Methoxytoluene,  
Dodecanal, p-mentha-1,4(8)-diene)

#### **14.3. Transport hazard class(es)**

ADR/RID/IMDG/ICAO-IATA: Class : 9  
ADR/RID/IMDG/ICAO-IATA: Label :  
ADR: Tunnel restriction code : --  
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L  
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. 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**

Seveso category:  
E2 - ENVIRONMENTAL HAZARDS

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**

Points modified compared to previous release: 1.1. Product identifier, 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 7.1. Precautions for safe handling, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 14.1. UN number or ID number, 14.2. UN proper shipping

name, 14.3. Transport hazard class(es)

Description of the hazard statements exposed to point 3

- H302 = Harmful if swallowed.
- H318 = Causes serious eye damage.
- H400 = Very toxic to aquatic life.
- H410 = Very toxic to aquatic life with long lasting effects.
- H317 = May cause an allergic skin reaction.
- H319 = Causes serious eye irritation.
- H412 = Harmful to aquatic life with long lasting effects.
- H315 = Causes skin irritation.
- H411 = Toxic to aquatic life with long lasting effects.
- H373 = May cause damage to organs through prolonged or repeated exposure .
- H335 = May cause respiratory irritation.
- H361 = Suspected of damaging fertility or the unborn child .
- H304 = May be fatal if swallowed and enters airways.
- H413 = May cause long lasting harmful effects to aquatic life.

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.

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