

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

Product code : Hygienfresh Essenza Soffio Tropicale

Trades code : A48-029

Product line: Hygienfresh

UFI: 8SC1-00MA-9002-3ET1

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], 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, 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:

Prevention

P261 - Avoid breathing vapours.

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, tetramethyl acetyloctahydronaphthalenes, Linalool, Limonene, Cyclamen aldehyde, Hydroxycitronellal, Allyl cyclohexylpropionate, Coumarin, Ethyl methylphenylglycidate, Hexyl cinnamal, Citronellol, Eugenol, Isoeugenol, Diacetyl.

Contains (Reg.EC 648/2004):

> 30% perfumes, 15% < 30% non-ionic surfactants, < 5% D-Limonene ((S)-p-menta-1,8-diene), a-Hexylcinnamaldehyde, Eugenol, Isoeugenol, Citronellol, Linalool, Linalool, Hydroxy-citronellal, Coumarin, Citronellol

For professional use only

UFI: 8SC1-00MA-9002-3ET1

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

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	54464-57-2	259-174-3	01-2119489 989-04
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 1 < 5%	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
Linalool	>= 0,1 < 1%	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
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 1 1	ND	68155-67-9	268-979-9	NR
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 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	68155-66-8	268-978-3	01-2119489 989-04-000 0
dipentene Note: C	>= 0,1 < 1%	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1	601-029-00-7	5989-27-5	205-341-0	01-2119529 223-47-000 1

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		ATE oral = 4.400,0 mg/kg ATE dermal = 5.000,0 mg/kg				
2-Methyl-3-(p-isopropylphenyl)propionaldehyde - FEMA 2743	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 3.810,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	103-95-7	203-161-7	01-2119970 582-32-000 0
7-hydroxycitronellal	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; Eye Irrit. 2, H319 ATE oral = 5.000,0 mg/kg	ND	107-75-5	ND	NR
Coumarin	>= 0,1 < 1%	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
allyl 3-cyclohexylpropionate - FEMA 2026	>= 0,1 < 1%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1B, H317; Acute Tox. 4, H332; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ATE oral = 585,0 mg/kg ATE dermal = 1.600,0 mg/kg ATE inhal = 0,1mg/l/4 h	ND	2705-87-5	220-292-5	01-2119976 355-27
ethyl 2,3-epoxy-3-phenylbutyrate - FEMA 0	>= 0,1 < 1%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 ATE oral = 5.470,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	77-83-8	201-061-8	NR
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
α-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
Isoeugenol	< 0,1%	Acute Tox. 4, H302;	604-094-00-X	97-54-1	202-590-7	NR

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		Skin Irrit. 2, H315; Skin Sens. 1A, H317; Eye Irrit. 2, H319 Limits: Skin Sens. 1A, H317 %C >=0,01;				

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

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

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.

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 a 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.

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection**8.1. Control parameters**

Related to contained substances:

dipentene:

TWA: 30 from AIHA

TWA: 165.5 (mg/m³) from AIHA

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

DNEL

Systemic effects Long term Workers inhalation = 1,76 (mg/m³)

Systemic effects Long term Workers dermal = 1,73 (mg/kg bw/day)

Systemic effects Short term Workers inhalation = 1,76 (mg/m³)

Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)

PNEC

Sweet water = 0,0028 (mg/l)

sediment Sweet water = 3,73 (mg/kg/sediment)

Sea water = 0,00028 (mg/l)

sediment Sea water = 0,75 (mg/kg/sediment)

ground = 0,705 (mg/kg ground)

- 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/m³)

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

Systemic effects Long term Consumers inhalation = 6,5 (mg/m³)

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/m³)

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

Systemic effects Long term Consumers inhalation = 0,7 (mg/m³)

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: 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

DNEL

Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 1,76 (mg/kg bw/day)

Local effects Short term Workers dermal = 0,1011 (mg/kg bw/day)

PNEC

Sweet water = 0,0028 (mg/l)

sediment Sweet water = 3,73 (mg/kg/sediment)

Sea water = 0,00028 (mg/l)

sediment Sea water = 0,75 (mg/kg/sediment)

ground = 0,705 (mg/kg ground)

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

DNEL

Systemic effects Short term Workers inhalation = 1,76 (mg/m³)

Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)

PNEC

Sweet water = 0,0028 (mg/l)

sediment Sweet water = 3,73 (mg/kg/sediment)

Sea water = 0,00028 (mg/l)

sediment Sea water = 0,75 (mg/kg/sediment)

ground = 0,705 (mg/kg ground)

- Substance: α -Hexylcinnamaldehyde

DNEL

Systemic effects Long term Workers inhalation = 0,000078 (mg/m³)

Systemic effects Short term Workers inhalation = 0,00628 (mg/m³)

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)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Handle with gloves. Gloves must be checked before use. Use a technique suitable for removing gloves (without touching the outer surface of the glove) to avoid the skin contact with this product. Dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands.

The selected protective gloves have to satisfy the requirements of EU directive 89/686 / EEC e



the resulting EN 374 standards.

Full contact

Material: Nitrile rubber

minimum thickness: 0.11 mm

breakthrough time: 480 min

The choice of an appropriate glove depends not only on the material but also on other quality characteristics which vary from one manufacturer to another.

For the choice of the type of gloves to use consult the supplier / manufacturer of the gloves.

Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Related to contained substances:

dipentene:

Do not let this chemical agent contaminate the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Liquid	
Colour	straw yellow	
Odour	characteristic	
Odour threshold	not determined	
pH	not determined	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	> 65 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	nonflammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0,980 - 1,020 g/cm3	
Solubility	not determined	
Water solubility	Completely soluble in water	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	

Physical and chemical properties	Value	Determination method
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 22,35 %

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 = 1.756,2 mg/kg

ATE(mix) dermal = 987.654,3 mg/kg

ATE(mix) inhal = 76,5 mg/l/4 h

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

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)

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

(1) Wistar rats (10/sex) were administered commercial grade HHCB (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 5000 mg/kg-bw and observed for 14 days. The corrected dose of HHCB was 3250 mg/kg-bw. One death occurred at this dose.

LD50 > 3250 mg/kg-bw

(2) Rats (10 females/dose; strain not specified) were administered commercial sample (65% HHCB in either diethyl

phthalate or isopropyl myristate) via gavage at 3000 mg/kg-bw and observed for 14 days. It is not clear whether the reported dose reflected dose of the mixture or of HHCB. Therefore, a conservative estimate of the LD50 is considered to be 65% of the test concentration. No mortality was observed during the study.

LD50 > 1950 mg/kg-bw

dipentene: LD50 Oral-rat-4.400 mg/kg

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

Other: Hair. Inhalation: Irritating to respiratory system.

LD50 Dermal-rabbit->5.000 mg/kg

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

(b) skin corrosion/irritation: based on available data, the classification criteria are not met.

(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.

(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

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

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

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

Carcinogenicity-mouse-Oral

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

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

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

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

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

At the end of the pre-weaning period, 24 male and 24 female pups per dose were retained for further study. On day 22 post-partum, excess pups and parents were sacrificed and examined for abnormalities. When offspring were 84 days of age, males and females were mated and produced litters. After day 21 post-partum, all F2 pups and F1 dams were sacrificed and examined internally and externally for abnormalities. No adverse effects on behavior or reproduction were observed at any dose in parental animals or in F1 or F2 pups.

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

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

(i) specific target organ toxicity (STOT) repeated

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

weeks. Test concentrations were determined from a range finding study in which a LOAEL of 300 mg/kg-bw/day (based on hepatic effects) was determined. Mean estimated test substance intakes were 5.4, 15.7, 51.8 or 155.8 mg/kg-bw/day for males and 5.1, 15.6, 51.9 or 154.6 mg/kg-bw/day for females. There were no mortalities, adverse clinical signs or treatment-related effects on body weight, hematology or ophthalmologic evaluation. Slightly lower mean plasma triglyceride levels were observed at week 13 in males at 50 and 150 mg/kg-bw/day. Slightly lower plasma glucose concentrations were noted at week 7 in males and females given 15, 50 and 150 mg/kg-bw/day and at week 13 in males given 50 and 150 mg/kg-bw/day; these effects were not seen at the end of the 4-week recovery period. There were no treatment-related differences in absolute organ weights or organ weight

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

Related to contained substances:

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

1,3,4,6,7,8-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

Linalool:

LD50 (rat) Oral (mg/kg body weight) = 2790

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In conformity to Regulation (EU) 2020/878

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-(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

dipentene:

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

Toxicity to Animals:

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

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

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

Other Toxic Effects on Humans:

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

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

Special Remarks on Toxicity to Animals: Not available.

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

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

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

Eyes: Causes eye irritation.

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

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

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

Chronic Potential Health Effects:

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

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

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

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

2-Methyl-3-(p-isopropylphenyl)propionaldehyde:

Oral-rat LD50 3810 mg / kg

Remarks: Behavior: ataxia Behavior: coma Cute and annexed: other: hair

Food and Cosmetics Toxicology. Vol. 2, Pg. 327, 1964.

LD50 Dermal - rat -> 5.000 mg / kg

Remarks: Sense organs: sight: lacrimation Behavior: drowsiness (depressive activity generic) Skin and appendages: other: hair

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LD50 (rat) Oral (mg/kg body weight) = 3810
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

7-hydroxycitronellal:
LD50 (rat) Oral (mg/kg body weight) = 5000

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

allyl 3-cyclohexylpropionate:
LD50 Oral - rat - 585 mg / kg
Remarks: Behavior: drowsiness (generic depressive activity) Skin and appendages: other: hair
LD50 (rat) Oral (mg/kg body weight) = 585
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1600
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,124

ethyl 2,3-epoxy-3-phenylbutyrate:
Oral LD50-5,470 rat mg/kg
Remark: sense organs: sight: other behavior: somnolence (General depressed activity) Cute
and Annex: more: hair
LD50 (rat) Oral (mg/kg body weight) = 5470
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

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

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

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

ethyl 2,3-epoxy-3-phenylbutyrate:
allyl 3-cyclohexylpropionate:
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.

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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-(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

1,3,4,6,7,8-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

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-(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

dipentene:
Ecotoxicity: Not available.
BOD5 and COD: Not available.

Products of Biodegradation:

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

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

Special Remarks on the Products of Biodegradation: Not available.

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

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

allyl 3-cyclohexylpropionate:

C(E)L50 (mg/l) = 0,13

NOEC (mg/l) = 0,28

ethyl 2,3-epoxy-3-phenylbutyrate:

C(E)L50 (mg/l) = 36

NOEC (mg/l) = 9,3

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

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

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)

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

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: 0000

ADR exemption because compliance with the following characteristics:

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

Inner packagings placed in shrink-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. (dipentene, Decanal, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, Allyl hexanoate, α -Hexylcinnamaldehyde, acetato di 4-terz-butilcicloesile, Grapefruit (Citrus Paradisi M.), ext., ACETYLCEDRENE, 2,3-Butandion, p-cresolo, 1',2',3',4',5',6',7',8'-ottaidro-2',3',8',8'-tetrametil-2'-acetonaftone, 1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one)

ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dipentene, Decanal, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, Allyl hexanoate, α -Hexylcinnamaldehyde, 4-tert-Butylcyclohexyl acetate, Grapefruit (Citrus Paradisi M.), ext., [3R-(3 α ,3a β ,7 β ,8a α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one, 2,3-Butandion, p-cresol, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-)

ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dipentene, Decanal, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, Allyl hexanoate, α -Hexylcinnamaldehyde, 4-tert-Butylcyclohexyl acetate, Grapefruit (Citrus Paradisi M.), ext., [3R-(3 α ,3a β ,7 β ,8a α)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one, 2,3-Butandion, p-cresol, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-)

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

Description of the hazard statements exposed to point 3

H302 = Harmful if swallowed.

H318 = Causes serious eye damage.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

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

H400 = Very toxic to aquatic life.

H319 = Causes serious eye irritation.

H411 = Toxic to aquatic life with long lasting effects.

H226 = Flammable liquid and vapour.

H373 = May cause damage to organs through prolonged or repeated exposure .

H312 = Harmful in contact with skin.

H332 = Harmful if inhaled.

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.