

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

1.1. Product identifier

Product code : Hygienfresh Essenza Vanilla Lemon
Trades code : A48-024
Product line: Hygienfresh

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

Perfumed essence

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

Hazard statement Code(s):

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

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

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

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

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product is dangerous to the environment as it is 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.
H315 - Causes skin irritation.
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:

Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated , 2,6-dimethyloct-7-en-2-ol, ETHYL TRIMETHYLCYCLOPENTENE BUTENOL, α -Hexylcinnamaldehyde, Hexyl salicylate, Coumarin, (Z)-hex-3-enyl salicylate, 1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one, (E)-1-methoxy-4-(1-propenyl)benzene, 2,4-dimethylcyclohex-3-ene-1-carbaldehyde, Dodecanal, 4-methyl-2-(2-methylprop-1-en-1-yl)tetrahydro-2H-pyran, 4-Methoxytoluene, 7-hydroxycitronellal, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde , 2-Methyl-3-(p-isopropylphenyl)propionaldehyde, Linalool, p-mentha-1,4(8)-diene, pin-2(3)-ene, 2-Methylundecanal, dipentene, citral, 3,5,5-Trimethylhexyl acetate

0,02% of the mixture consists of components whose toxicity is unknown.

Contains (Reg.EC 648/2004):

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

For professional use only

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
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated - FEMA 0	> 20 <= 30%	Acute Tox. 4, H302; Eye Dam. 1, H318		24938-91-8		
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	603-212-00-7	1222-05-5	214-946-9	01-2119488 227-29-000 0
dipentene Note: C	> 1 <= 5%	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	601-029-00-7	5989-27-5	205-341-0	01-2119529 223-47-000 1
diethyl phthalate - FEMA 0	> 1 <= 5%	Eye Irrit. 2, H319		84-66-2	201-550-6	01-2119430 458-38-000 0
citral	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317	605-019-00-3	5392-40-5	226-394-6	01-2119462 829-23-000 1
α-Hexylcinnamaldehyde	> 1 <= 5%	Skin Sens. 1, H317; Aquatic Chronic 2, H411		101-86-0	202-983-3	
2,6-dimethyloct-7-en-2-ol - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315		18479-58-8	242-362-4	
ETHYL TRIMETHYLCYCLOPENTENE BUTENOL - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		28219-61-6	248-908-8	
Coumarin	> 1 <= 5%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373		91-64-5	202-086-7	01-2119943 756-26-000 0
Hexyl salicylate - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		6259-76-3	228-408-6	01-2119638 275-36-000 2
3a, 4, 5, 6, 7, 7a-Hexahydro-4,7-methanoinden-6-yl acetate - FEMA 0	> 1 <= 5%	Aquatic Chronic 3, H412		5413-60-5	226-501-6	
2-tert-Butylcyclohexyl acetate - FEMA 0	> 1 <= 5%	Aquatic Chronic 2, H411		88-41-5	201-828-7	
Anisaldehyde (p-Methoxybenzaldehyde) - FEMA 2670	> 1 <= 5%	Acute Tox. 4, H302		123-11-5	204-602-6	
(Z)-hex-3-enyl salicylate	> 0,1 <= 1%	Skin Sens. 1, H317; Aquatic Chronic 1, H410		65405-77-8	265-745-8	
7-hydroxycitronellal	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318;		107-75-5		

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
		Eye Irrit. 2, H319				
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	
(E)-1-methoxy-4-(1-propenyl)benzene - FEMA 2086	> 0,1 <= 1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411		4180-23-8	224-052-0	01-2119969 443-29-000 0
camphene - FEMA 2229	> 0,1 <= 1%	Flam. Sol. 2, H228; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		79-92-5	201-234-8	
2,4-dimethylcyclohex-3-ene-1-carbaldehyde - FEMA 0	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412		68039-49-6	268-264-1	
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

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):

Take contaminated clothing Immediately off.

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

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

Direct contact with eyes (of the pure product):

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

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

Ingestion:

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 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 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

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
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:

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	ochre liquid	
Odour	characteristic	
Odour threshold	not determined	
pH	not determined	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	> 100 °C	
Flash point	> 60 °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/cm ³	
Solubility	not determined	
Water solubility	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	
Oxidising properties	non-oxidizing	

Physical and chemical properties	Value	Determination method
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9.2. Other information

Content of VOC ready to use condition: 26,00 %

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 toxicological effects

ATE(mix) oral = 1.626,6 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

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

2,6-dimethyloct-7-en-2-ol: LD50 Oral - rat - 3,600 mg/kg

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

2-tert-Butylcyclohexyl acetate: Dermal, rodent-rabbit: Ld50 = > 5000 mg/kg

Oral, rat: LD = 3000 mg/kg

2,4-dimethylcyclohex-3-ene-1-carbaldehyde: LD 50 ORAL (mg/kg) : >4000

ORGANISM : RAT

LD 50 DERMAL (mg/kg) : >5000

ORGANISM : RABBIT

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

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

Result: Mild skin irritation - 24 h

(Draize Test)

camphene: Leather - on rabbit

Result: No skin irritation - 4 h

(OECD TG 404)

2,4-dimethylcyclohex-3-ene-1-carbaldehyde: TEST : ACUTE DERMAL IRRITATION

ORGANISM : RABBIT

(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.

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

Result: Moderate eye irritation

(Draize Test)

2-tert-Butylcyclohexyl acetate: Draize test, rabbit and rodent skin: 500 mg/12:0 am Moderate

camphene: Eyes - on rabbit

Result: Irritating to the eyes. - 24 h

(OECD TG 405)

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

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

Did not cause sensitisation on laboratory anima

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

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

2,4-dimethylcyclohex-3-ene-1-carbaldehyde: SENSITIZATION (ANIMAL): SENSITIZING

TEST : SKIN SENSITIZATION

ORGANISM : GUINEA PIG

SENSITIZATION (HUMAN) : NOT SENSITIZING

TEST : HRIPT

AT 10.00 (%) IN PETLM

(e) germ cell mutagenicity: camphene: hamster

ovary

Result: negative

mouse

lymphocyte

Result: negative

Mutagenicity (micronucleus assay)

mouse - male and female

Result: negative

(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:

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

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

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

dipentene:

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

Toxicity to Animals:

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

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

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

Other Toxic Effects on Humans:

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

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

Special Remarks on Toxicity to Animals: Not available.

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

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

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

Eyes: Causes eye irritation.

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

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

It may affect behavior/central nervous and peripheral nervous system. Central nervous system effects may include

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

Chronic Potential Health Effects:

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

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

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

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

diethyl phthalate:

Oral LD50/rat: mg/kg 8600

Inhalation LC50/rat: 7.5 mg/l/4:0

LD50 dermal/guinea pig: 22400 > mg/kg

LD50 (rat) Oral (mg/kg body weight) = 8600

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 22400

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 7,5

citral:

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

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

α -Hexylcinnamaldehyde:

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

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

Skin - rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

Eyes - rabbit

Result: Moderate eye irritation

(Draize Test)

Oral LD50 (rat) : 3600 mg/kg

Dermal LD50 (rabbit) >5000 mg/kg

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

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

ETHYL TRIMETHYLCYCLOPENTENE BUTENOL:

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

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

Hexyl salicylate:

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

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

3a, 4, 5, 6, 7, 7a-Hexahydro-4,7-methanoinden-6-yl acetate:

LD50 (rat) Oral (mg/kg body weight) = 3000

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

2-tert-Butylcyclohexyl acetate:

LD50 (rat) Oral (mg/kg body weight) = 3000

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

Anisaldehyde (p-Methoxybenzaldehyde):

LD50 (rat) Oral (mg/kg body weight) = 3200

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

(Z)-hex-3-enyl salicylate:

LD50 Oral - rat - 5.000 mg / kg

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

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

7-hydroxycitronellal:

LD50 (rat) Oral (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

(E)-1-methoxy-4-(1-propenyl)benzene:

DL50 orale de 2090 mg / kg chez le rat

COMPORTEMENTAL: SOMNOLENCE (ACTIVITÉ GÉNÉRALE DÉPRIMÉE) COMPORTEMENTAL: COMA

Toxicologie alimentaire et cosmétique. Vol. 2, pg. 327, 1964.

DL50 intrapéritonéale 900 mg / kg

Thérapie Vol. 22, pg. 309, 1967.

DL50 par voie orale 3050 mg / kg

COMPORTEMENTAL: SOMNOLENCE (ACTIVITÉ GÉNÉRALE DÉPRIMÉE) COMPORTEMENTAL: COMA

Toxicologie alimentaire et cosmétique. Vol. 2, pg. 327, 1964.

LD50 intraperitoneale-souris 650 mg / kg

Thérapie Vol. 22, pg. 309, 1967.

DL50 orale 2167 mg / kg

COMPORTEMENT: SOMNOLENCE (ACTIVITÉ DÉPRIMÉE GÉNÉRALE)

Toxicologie alimentaire et cosmétique. Vol. 2, pg. 327, 1964.

LD50 (rat) Oral (mg/kg body weight) = 2090

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

camphene:

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

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2500

2,4-dimethylcyclohex-3-ene-1-carbaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 4000

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

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

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

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

diethyl phthalate:

Acute toxicity to fish:

Blue gill/EC50 (83d): 17 mg/l

Rainbow trout/LC50 (83d): 12 mg/l

Acute toxicity to aquatic invertebrates:

Daphnia magna/EC50 (48 h): 86 mg/l

Mysid shrimp/LC50 (83d): 10 mg/l

Acute toxicity to microorganisms:

Green algae/EC50 (83d): 90 mg/l

Marine algae/EC50 (83d): 66 mg/l

C(E)L50 (mg/l) = 12

citral:

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

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

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

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

α-Hexylcinnamaldehyde:

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

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

96 Hour LC50 = 4.81 mg/l EPA ECOSAR
Daphnia magna 48 hrs LC50 = 5.70 mg
Green algae 96 hr NOEC, LOEC or NOEL, LOEL EC50 = 3.88 mg/l
C(E)L50 (mg/l) = 4,81

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-tert-Butylcyclohexyl acetate:

Toxicity to daphnia (EC50 mg/l) as predicted by v. Topkat 6.1 9.8 mg/l
C(E)L50 (mg/l) = 9,8

Anisaldehyde (p-Methoxybenzaldehyde):

C(E)L50 (mg/l) = 43

(Z)-hex-3-enyl salicylate:

C(E)L50 (mg/l) = 0,61

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

camphene:

Toxicity to fish CL50 continuous flow test - *Brachydanio rerio* - 0.72 mg / l - 96 h
(OECD TG 203)

Toxicity to daphnia Semi-static test CE50 - *Daphnia magna* (Water flea) - 0.72 mg / l -

and for other aquatic invertebrates 48 h (OECD TG 202)

Toxicity to algae static test EC50 - *Desmodesmus subspicatus* (*Scenedesmus subspicatus*) -> 1,000 mg / l - 72 h
(OECD TG 201)

Toxicity to bacteria CE50 respiration inhibitor - Sludge treatment -> 1,000 mg / l - 3 h (OECD Test Guideline 209)

C(E)L50 (mg/l) = 0,72

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

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

citral:

OECD TG 301 c Readily biodegradable

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

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

72% within 28 days in an OECD 301B assay

Coumarin:

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

Anisaldehyde (p-Methoxybenzaldehyde):

BOD (5d): 2.020 mg/g

COD: 1.5150 mg/g

Ratio BOD/COD: 60%

camphene:

aerobic - Exposure time 28 d

Result: 14% - Not immediately biodegradable.
(OECD TG 301 C)

12.3. Bioaccumulative potential

Related to contained substances:

citral:

None

Coumarin:

6.7

camphene:

Cyprinus carpio (Carp) - 56 d

at 25 ° C - 0.015 mg / l

Bioconcentration factor (BCF): 432 - 922

(OECD Test Guidelines No.305C)

12.4. Mobility in soil

Related to contained substances:

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: 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, ETHYL TRIMETHYLCYCLOPENTENE BUTENOL, α -Hexylcinnamaldehyde, acetato di 2-terz-butilcicloesile, Coumarin, cis-3-Hexenyl salicylate, 1-(5,6,7,8-tetraidro-3,5,5,6,8,8-esametil-2-naftil) etan-1-one, Dodecanal, 2,6-di-terz-butyl-p-cresolo, 4-Methoxytoluene, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, canfene, p-mentha-1,4(8)-diene, pin-2(3)-eno, dipentene, 3,5,5-Trimethylhexyl acetate)

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

(1,3,4,6,7,8-hexahidro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, ETHYL TRIMETHYLCYCLOPENTENE BUTENOL, α -Hexylcinnamaldehyde, 2-tert-Butylcyclohexyl acetate, Coumarin, (Z)-hex-3-enyl salicylate, 1-(5,6,7,8-tetraidro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one, Dodecanal, 2,6-di-tert-butyl-p-cresol, 4-Methoxytoluene, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, camphene, p-mentha-1,4(8)-diene, pin-2(3)-ene, dipentene, 3,5,5-Trimethylhexyl acetate)

ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(1,3,4,6,7,8-hexahidro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, ETHYL TRIMETHYLCYCLOPENTENE BUTENOL, α -Hexylcinnamaldehyde, 2-tert-Butylcyclohexyl acetate, Coumarin, (Z)-hex-3-enyl salicylate, 1-(5,6,7,8-tetraidro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one, Dodecanal, 2,6-di-tert-butyl-p-cresol, 4-Methoxytoluene, alpha-Methyl-1,3-benzodioxole-5-propionaldehyde, camphene, p-mentha-1,4(8)-diene, pin-2(3)-ene, dipentene, 3,5,5-Trimethylhexyl acetate)

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 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. 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
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.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H226 = Flammable liquid and vapour.
H315 = Causes skin irritation.
H317 = May cause an allergic skin reaction.
H319 = Causes serious eye irritation.
H411 = Toxic to aquatic life with long lasting effects.
H373 = May cause damage to organs through prolonged or repeated exposure .
H412 = Harmful to aquatic life with long lasting effects.
H228 = Flammable solid.

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.
