

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

1.1. Product identifier

Product code : HygienFresh Essenza Capri-Marine
Trades code : A48-032
Product line: Hygienfresh

UFI: 4W52-90UN-1002-WFHX

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]

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. 1B, 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

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

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.

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, Tetramethyl acetyloctahydronaphthalenes, Linalool, Amyl salicylate, Hexamethylindanopyran, Limonene, 2-methylbutyl salicylate Citrus Aurantium Peel Oil, Citronellol, Coumarin, Eucalyptus Globulus Oil, Rose Ketones, Pogostemon Cablin Oil, Pinene, Lavandula Oil, Eugenol, alpha isomethyl ionone, Vanillin, Linalyl acetate, Isoeugenyl Acetate, citral.

Contains (Reg. EC 648/2004):

> 30% perfumes, >= 15% < 30% non-ionic surfactants, < 5% Linalool, Amyl Salicylate, Hexamethylindanopyran, d-Limonene, Citronellol, Coumarin, Linalyl Acetate, Vanillin, 3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one, Rose Ketones, Citral, Citrus Aurantium Amara Peel Oil, Pinenes, Eucalyptus Species Leaf Oil, Pogostemon Cablin oil, Lavandula Hybrida Herb Oil, Isoeugenyl Acetate, Eugenol

For professional use only

UFI: 4W52-90UN-1002-WFHX

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

No information on other hazards

SECTION 3. Composition/information on ingredients
3.1 Substances

Irrilevant

3.2 Mixtures

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	ND
2,6-dimethyloct-7-en-2-ol - FEMA 0	>= 5 < 15%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 3.600,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	18479-58-8	242-362-4	01-2119457 274-37
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 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	54464-57-2	259-174-3	01-2119489 989-04
Linalool	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,000 mg/kg ATE dermal = 5.610,000 mg/kg ATE inhal = 307,000 mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474 016-42-000 0
pentyl salicylate - FEMA 0	>= 0,1 < 1%	Aquatic Chronic 2, H411	ND	2050-08-0	218-080-2	01-2120771 342-58

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		1 1 ATE oral = 15,800 mg/kg				
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	>= 0,1 < 1%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ATE oral = 3.250,000 mg/kg ATE dermal = 3.250,000 mg/kg	603-212-00-7	1222-05-5	214-946-9	01-2119488 227-29-000 0
dipentene Note: C	>= 0,1 < 1%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 ATE oral = 4.400,000 mg/kg ATE dermal = 5.000,000 mg/kg	601-096-00-2	5989-27-5	227-813-5	01-2119529 223-47-000 1
3-(4-Isobutyl-2-methylphenyl)propanal	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; Acute Tox. 4, H332; Aquatic Chronic 2, H411 1 1 ATE oral > 2.000,000 mg/kg ATE dermal > 2.000,000 mg/kg ATE inhal = 5,000 mg/l/4 h	ND	1637294-12-2	811-285-3	01-2120103 156-71
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 1 1 ATE oral = 4.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	68039-49-6	268-264-1	ND
Citronellol	>= 0,1 < 1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,000 mg/kg ATE dermal = 2.650,000 mg/kg ATE inhal = 1,300 mg/l/4 h	ND	106-22-9	203-375-0	01-2119453 995-23-000 0
Coumarin	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373 ATE oral = 293,000 mg/kg	ND	91-64-5	202-086-7	01-2119943 756-26-000 0

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		ATE dermal = 242,000 mg/kg				
4-Methyl-3-decen-5-ol - FEMA 0	>= 0,1 < 1%	Aquatic Acute 1, H400; Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg	ND	81782-77-6	279-815-0	01-2119983 528-21
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate - FEMA 0	>= 0,1 < 1%	Skin Sens. 1B, H317	ND	4707-47-5	225-193-0	01-2120762 759-36
Eucalyptus globulus oil - FEMA 0	>= 0,1 < 1%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg	ND	84625-32-1	283-406-2	01-2119978 250-37

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.

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: 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: 1,3,4,6,7,8-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: 3-(4-Isobutyl-2-methylphenyl)propanal
PNEC
Sweet water = 0,0064 (mg/l)
sediment Sweet water = 1,3 (mg/kg/sediment)
Sea water = 0,00064 (mg/l)
sediment Sea water = 0,13 (mg/kg/sediment)
STP = 1 (mg/l)
ground = 0,256 (mg/kg ground)

- Substance: Citronellol
DNEL
Systemic effects Long term Workers inhalation = 161,6 (mg/m³)

8.2. Exposure controls



Appropriate engineering controls:
Industrial Manufacturing:
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
Physical state	Liquid	
Colour	colorless	
Odour	caratteristico	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	irrelevant	
Flammability	nonflammable	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	ASTM D92
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	not determined	
Kinematic viscosity	not determined	
Solubility	Completely soluble in water	
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 ³	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

9.2. Other information

Content of VOC ready to use condition: 25,38 %

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

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 = 1.676,7 mg/kg

ATE(mix) dermal = 2.601.626,0 mg/kg

ATE(mix) inhal = 154,8 mg/l/4 h

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

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

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

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

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

pentyl salicylate: LC50 = 15.8 mg/L 83d Zebra fish (Brachydanio rerio)

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

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

ORGANISM : RAT

LD 50 DERMAL (mg/kg) : >5000

ORGANISM : RABBIT

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

ihl-rat LCLo:1.3 mg/m3/4H

(b) skincorrosion/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)

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

ORGANISM : RABBIT

Citronellol: skn-rbt 100 mg/24H SEV

Skin - Human - Skin irritation - 48 h

(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)

(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 sensitization on laboratory animal

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

Citronellol: mouse - May cause sensitization by skin contact.

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:

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

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

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

pentyl salicylate:

LD50 (rat) Oral (mg/kg body weight) = 15,8

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

3-(4-Isobutyl-2-methylphenyl)propanal:

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

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

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

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

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

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

4-Methyl-3-decen-5-ol:

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

Eucalyptus globulus oil:

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

1

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 1

1

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

1

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

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 1

3-(4-Isobutyl-2-methylphenyl)propanal:

C(E)L50 (mg/l) = 0,62

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 1

1

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 1

1

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

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

72% within 28 days in an OECD 301B assay

Linalool:

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

pentyl salicylate:

Pentyl 2-hydroxybenzoate is predicted to be readily degradable.

4-Methyl-3-decen-5-ol:

Biodegradability: Result: Readily biodegradable.

73%

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

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

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 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',2',3',4',5',6',7',8'-ottaidro-2',3',8',8'-tetrametil-2'-acetonaftone, salicilato di pentile,

1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, dipentene, Coumarin, Eucalyptus oil span. rect, 70%, organic)

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

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

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, Coumarin, Eucalyptus globulus oil)

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

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

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, dipentene, Coumarin, Eucalyptus globulus oil)

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

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

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.
H319 = Causes serious eye irritation.
H336 = May cause drowsiness or dizziness.
H317 = May cause an allergic skin reaction.
H410 = Very toxic to aquatic life with long lasting effects.

H411 = Toxic to aquatic life with long lasting effects.
H400 = Very toxic to aquatic life.
H226 = Flammable liquid and vapour.
H304 = May be fatal if swallowed and enters airways.
H332 = Harmful if inhaled.
H412 = Harmful to aquatic life with long lasting effects.
H335 = May cause respiratory irritation.
H373 = May cause damage to organs through prolonged or repeated exposure .

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H302 - Harmful if swallowed. Classification procedure: Calculation method
H315 - Causes skin irritation. Classification procedure: Calculation method
H317 - May cause an allergic skin reaction. Classification procedure: Calculation method
H318 - Causes serious eye damage. Classification procedure: Calculation method
H411 - Toxic to aquatic life with long lasting effects. Classification procedure: Calculation method

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.
