

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

### **1.1. Product identifier**

Product code : Hygienfresh DeoEssenza Ambiente Capri  
Trades code : A74-033  
Product line: Hygienfresh

UFI: 9PN1-N0DM-400H-VXDR

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

Concentrated essence and multifunctional deo for environments. It perfumes, cleans and excites you with just one spray.

Sectors of use:

Industrial Manufacturing[SU3], Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

### **1.3. Details of the supplier of the safety data sheet**

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

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

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

National contact: Malta: Emergency Ambulance 112  
Accident & Emergency Department 2545 4030

### **1.4. Emergency telephone number**

The UK National Poisons Emergency number +44 (0)870 600 6266  
London: Emergency 24 hour telephone +44 (0) 207188 0100

## **SECTION 2. Hazards identification**

### **2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:  
GHS05

Hazard Class and Category Code(s):  
Eye Dam. 1, Aquatic Chronic 3

Hazard statement Code(s):  
H318 - Causes serious eye damage.  
H412 - Harmful to aquatic life with long lasting effects.

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 harmful 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 - Danger



Hazard statement Code(s):  
H318 - Causes serious eye damage.  
H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):  
EUH208 - Contains 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, Linalool, dipentene, 3-(4-Isobutyl-2-methylphenyl)propanal, Citronellol, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Precautionary statements:

General

- P101 - If medical advice is needed, have product container or label at hand.
- P102 - Keep out of reach of children.

Prevention

- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

Disposal

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

Contains:

aqua, trideceth-12, parfum, ricinus communis oil, ethoxydiglycol, isopropyl alcohol, tetramethyl acetyloctahydronaphthalenes, Linalool, Limonene, 3-(4-Isobutyl-2-methylphenyl)propanal, Citronellol, Coumarin, Eugenol, tetrasodium EDTA, dimethicone, steareth-21, methylchloroisothiazolinone, methylisothiazolinone.

Contains (Reg.EC 648/2004):

>= 5% < 15% perfumes, non-ionic surfactants, < 5% Linalool, Limonene, Citronellol, Coumarin, Eugenol, methylchloroisothiazolinone, methylisothiazolinone.

Content of VOC ready to use condition: 7,07 %

UFI: 9PN1-N0DM-400H-VXDR

## 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

No information on other hazards

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrelevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated - FEMA 0	>= 5 < 15%	Acute Tox. 4, H302; Eye Dam. 1, H318	ND	24938-91-8	ND	ND
Propan-2-ol - FEMA 2929	>= 1 < 5%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 2.100,0 mg/kg ATE dermal = 2.100,0 mg/kg ATE inhal = 29,0mg/l/4 h	603-117-00-0	67-63-0	200-661-7	ND
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	>= 0,1 < 1,00%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410 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
ethanol	>= 0,1 < 1%	Flam. Liq. 2, H225 ATE oral = 7.060,0 mg/kg ATE dermal = 20.000,0 mg/kg ATE inhal = 20.000,0mg/l/4 h	603-002-00-5	64-17-5	200-578-6	01-2119457 610-43
Linalool	>= 0,1 < 1,00%	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
1,3,4,6,7,8-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 = 3.250,0 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
dipentene Note: C	>= 0,1 < 1,00%	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1,	601-096-00-2	5989-27-5	227-813-5	01-2119529 223-47-000 1

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		H400; Aquatic Chronic 1, H410 1 ATE oral = 4.400,0 mg/kg ATE dermal = 5.000,0 mg/kg				
3-(4-Isobutyl-2-methylphenyl)propanal	>= 0,1 < 1,00%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; Acute Tox. 4, H332; Aquatic Chronic 2, H411 1 1 ATE oral > 2.000,0 mg/kg ATE dermal > 2.000,0 mg/kg ATE inhal = 5,0mg/l/4 h	ND	1637294-12-2	811-285-3	01-2120103 156-71
Citronellol	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,0 mg/kg ATE dermal = 2.650,0 mg/kg ATE inhal = 1,3mg/l/4 h	ND	106-22-9	203-375-0	01-2119453 995-23-000 0
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) Note: B	< 0,1%	EUH071; Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Corr. 1C, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Limits: Skin Corr. 1C, H314 %C >=0,6; Skin Irrit. 2, H315 0,06<=%C <0,6; Eye Dam. 1, H318 %C >=0,6; Eye Irrit. 2, H319 0,06<=%C <0,6; Skin Sens. 1A, H317 %C >=0,0015; 100 100	613-167-00-5	55965-84-9	ND	ND

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

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

Wash thoroughly with soap and running water.

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:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

#### **4.2. Most important symptoms and effects, both acute and delayed**

No data available.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

If medical advice is needed, have product container or label at hand.

Immediately call a POISON CENTER/doctor/physician

### **SECTION 5. Firefighting measures**

#### **5.1. Extinguishing media**

Advised extinguishing agents:

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

#### **5.2. Special hazards arising from the substance or mixture**

No data available.

#### **5.3. Advice for firefighters**

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

### **SECTION 6. Accidental release measures**

#### **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.

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.

At work do not eat or drink.

See also paragraph 8 below.

## **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool place, away from sources of heat and direct exposure of sunlight.

## **7.3. Specific end use(s)**

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Private households (= general public = consumers):

Handle with care.

Store in ventilated place away from heat sources,

Keep the container tightly closed.

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

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

# **SECTION 8. Exposure controls/personal protection**

## **8.1. Control parameters**

Related to contained substances:

Propan-2-ol:

TLV: TWA 200 ppm 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK: 200 ppm 500 mg/m peak limitation Category: II (2); Risk group for pregnancy: C; (DFG 2004).

ethanol:

Component CAS-No. Value Control parameters

Basis

Ethanol-17-64 TWA 5 ppm 1.000

1.920 mg/m<sup>3</sup>

UK. EH40 WEL-Workplace Exposure Limits

Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

dipentene:

TWA: 30 from AIHA

TWA: 165.5 (mg/m<sup>3</sup>) from AIHA

- Substance: Propan-2-ol

DNEL

Systemic effects Long term Workers inhalation = 500 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 888 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 89 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 26 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 26 (mg/kg bw/day)

PNEC

Sweet water = 140,9 (mg/l)

sediment Sweet water = 552 (mg/kg/sediment)

Sea water = 140,9 (mg/l)

sediment Sea water = 552 (mg/kg/sediment)

intermittent emissions = 140,9 (mg/l)

STP = 2251 (mg/l)

ground = 28 (mg/kg ground)

- 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/m<sup>3</sup>)

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

Systemic effects Short term Workers inhalation = 1,76 (mg/m<sup>3</sup>)

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: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 114 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)

PNEC

Sweet water = 0,96 (mg/l)

sediment Sweet water = 3,6 (mg/kg/sediment)

Sea water = 0,79 (mg/l)

sediment Sea water = 2,9 (mg/kg/sediment)

intermittent emissions = 2,75 (mg/l)

STP = 580 (mg/l)

ground = 0,63 (mg/kg ground)

- Substance: Linalool

DNEL

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

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

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

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

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

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

DNEL

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

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

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

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

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

PNEC

Sweet water = 0,0044 (mg/l)

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

Sea water = 0,00044 (mg/l)

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

ground = 0,31 (mg/kg ground)

- Substance: 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)

intermittent emissions = 0,0101 (mg/l)

STP = 1 (mg/l)

ground = 0,256 (mg/kg ground)

- Substance: Citronellol

DNEL

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

## 8.2. Exposure controls



Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen

Private households (= general public = consumers):

No specific checks planned

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

No specific monitoring foreseen

Individual protection measures:

**(a) Eye / face protection**

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

**(b) Skin protection**
**(i) Hand protection**

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	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	not determined	
Flammability	nonflammable	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	ASTM D92
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	

Physical and chemical properties	Value	Determination method
pH	7-8	
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	0,98 - 1,03 gr/cm <sup>3</sup>	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

## 9.2. Other information

### 9.2.1 Information with regard to physical hazard classes

No data available.

### 9.2.2 Other safety characteristics

Content of VOC ready to use condition: 7,07 %

## 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 generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.

It can generate toxic gases to contact with inorganic sulfide, strong reducing agents.

## 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 = 8.173,9 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = 4.444,4 mg/l/4 h

(a) acute toxicity: 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)

ethanol: LD50 Oral-rat-7.060 mg/kg

Remarks: Lungs, Thorax, or Respiration: Other changes.

LC50 Inhalation-rat-10:0-20000 ppm

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

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

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

(b) skincorrosion/irritation: Propan-2-ol: Skin-rabbit

Result: Mild skin irritation

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

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.

ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

Propan-2-ol: Eyes-rabbit

Result: Eye irritation- 24 h

(d) respiratoryorskinsensitisation: Citronellol: mouse - May cause sensitization by skin contact.

(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) eproductivetoxicity: ethanol: Reproductive toxicity-Human-female-Oral

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.  
Effects on Newborn: Drug dependence.

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.

Health hazards :

Eye contact: Accidental contact of the product with the eyes may cause irritation.

Skin contact: The product is not an irritant. Repeated and prolonged direct contact can degrease and irritate the skin, in some cases causing dermatitis.

Ingestion: Ingested product may cause irritation of the mucous membranes of the throat and digestive system with consequent abnormal digestive symptoms and intestinal disturbances.

Inhalation: Prolonged exposure to vapors or mists of the product can cause irritation to the respiratory tract.

Related to contained substances:

Propan-2-ol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause effects on the central nervous system, causing depression. Much greater exposure to the OEL may lead to unconsciousness.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Vertigo. Drowsiness. Headaches. Sore throat. See If Swallowed.

CUTE CUTE.

EYE Redness.

INGESTION abdominal pain. Difficulty in breathing. Nausea. State of unconsciousness. Vomiting. (Further see inhalation).

NOT and use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 29

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

ethanol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can concetrazioni cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.

CUTE CUTE.

EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.

LD50 (rat) Oral (mg/kg body weight) = 7060

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

Linalool:

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

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5610

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 307

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

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

### 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

Propan-2-ol:

Toxicity to fish LC50-Pimephales promelas (fathead minnow)-9, 640.00 mg/l-96 h

Toxicity to daphnia and other aquatic invertebrates

-EC50 Daphnia magna (Water flea)-5, 102.00 mg/l- 24 h

EC50 Immobilization-Daphnia magna (Water flea)-6.851 mg/l- 24h

C(E)L50 (mg/l) = 5102

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

Endpoint: LC50 species: lepomismacrochirus (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

ethanol:  
C(E)L50 (mg/l) = 11200

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

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

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

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute toxicity to fish

The material is very toxic to aquatic organisms (LC50 / EC50 / IC50 below 1 mg / l for the most sensitive species).  
LC50, *Oncorhynchus mykiss* (rainbow trout), flow-through test, 96 Hour, 0.19 mg / l, OECD Test Guideline 203 or equivalent

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), Flow-through test, 48 h, 0.16 mg / l, OECD Test Guideline 202 or equivalent

Acute toxicity to algae / aquatic plants

EC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, 0.027 mg / l, OECD Test Guideline 201 or equivalent  
NOEC, *Skeletonema costatum*, Static test, 72 h, Growth rate, 0.0014 mg / l

Chronic toxicity to fish

NOEC, Rainbow trout (*Oncorhynchus mykiss*), flow, 14 d, 0.05 mg / l

Chronic toxicity to aquatic invertebrates

NOEC, *Daphnia magna*, Flow-through test, 21 d, 0.1 mg / l

100

NOEC (mg/l) = 0,05 100

The product is dangerous for the environment as it is toxic for 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)

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradation (aquatic metabolism): 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT):

t  $\frac{1}{2}$  anaerobic = 0.2 days. t  $\frac{1}{2}$  aerobic = 0.38 - 1.3 days. 2-methyl-4-isothiazolin-3-one (MIT): aerobic t  $\frac{1}{2}$  = 0.38 - 1.4 days

Biodegradability: Considered to be rapidly degradable. The product is not readily biodegradable according to OECD / EC criteria.

Biodegradation: <50%

Exposure time: 10 d

Photodegradation

Atmospheric half-life: 0.38 - 1.3 d

12.3 Bioaccumulative potential

Partition coefficient: n-octanol / water (log Pow): 0.401 Method not specified.

### 12.3. Bioaccumulative potential

Related to contained substances:

Linalool:

106

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Low potential for bioconcentration (FBC or Log Pow < 100 < 3).

### 12.4. Mobility in soil

Related to contained substances:

Linalool:

log Pow: 2.55

Soil adsorption (Koc): 75

Henry's Law constant(PaM<sup>3</sup>/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**

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**

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

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

None

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

None

#### **14.4. Packing group**

None

#### **14.5. Environmental hazards**

None

#### **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**

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.
- H225 = Highly flammable liquid and vapour.
- H319 = Causes serious eye irritation.
- H336 = May cause drowsiness or dizziness.
- 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.
- H226 = Flammable liquid and vapour.
- H304 = May be fatal if swallowed and enters airways.
- H332 = Harmful if inhaled.
- H411 = Toxic to aquatic life with long lasting effects.
- H335 = May cause respiratory irritation.
- H301 = Toxic if swallowed.
- H310 = Fatal in contact with skin.
- H314 = Causes severe skin burns and eye damage.
- H330 = Fatal if inhaled.

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

- H318 - Causes serious eye damage. Classification procedure: Calculation method
- H412 - Harmful 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.