

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

### **1.1. Product identifier**

Product code : Hygienfresh Deodiffusore Lavanda  
Trades code : A80-094  
Product line: Hygienfresh

UFI: 1R21-V04N-4003-MKM8

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

Fragrance Diffuser sticks-exciting environment of long duration

Sectors of use:

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:

GHS02, GHS07

Hazard Class and Category Code(s):

Flam. Liq. 2, Skin Sens. 1B, Eye Irrit. 2, Aquatic Chronic 3

Hazard statement Code(s):

H225 - Highly flammable liquid and vapour.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

The product easy inflames if subordinate to an ignition source.

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

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

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):  
GHS02, GHS07 - Danger



Hazard statement Code(s):  
H225 - Highly flammable liquid and vapour.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):  
not applicable

Precautionary statements:

General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P273 - Avoid release to the environment.

Response

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.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use CO2 or powder extinguisher to extinguish.

Disposal

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

Contains:

alcohol, PPG-2 methyl ether, parfum, linalool, geraniol, tetramethyl acetyloctahydronaphthalenes, nerol, coumarin, cyclamen aldehyde, alpha isomethyl ionone, eucalyptol.

Packaging to be fitted with a tactile warning

Content of VOC ready to use condition: 91,801

UFI: 1R21-V04N-4003-MKM8

## 2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrilevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
ethanol	>= 50 < 75%	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
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	>= 15 < 25%	Eye Irrit. 2, H319 ATE oral = 7.000,0 mg/kg ATE dermal = 2.000,0 mg/kg	ND	100-79-8	202-888-7	NR
Linalool	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,0 mg/kg ATE dermal = 5.610,0 mg/kg ATE inhal = 307,0mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474 016-42-000 0
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	54464-57-2	259-174-3	01-2119489 989-04
nerol - FEMA 2770	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319 ATE oral = 4.500,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	106-25-2	203-378-7	01-2119983 244-33
2,6-dimethyloct-7-en-2-ol - FEMA 0	>= 1 < 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 3.600,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	18479-58-8	242-362-4	01-2119457 274-37
2-Methyl-3-(p-isopropylphenyl)propionaldehyde - FEMA 2743	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411 1 1 ATE oral = 3.810,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	103-95-7	203-161-7	01-2119970 582-32-000 0
3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one - FEMA	>= 1 < 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317;	ND	127-51-5	204-846-3	NR

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
2714		Eye Irrit. 2, H319; Aquatic Chronic 2, H411 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg				
cineole - FEMA 2465	>= 1 < 5%	Flam. Liq. 3, H226; Skin Sens. 1B, H317 ATE oral = 2.480,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	470-82-6	207-431-5	01-2119967 772-24
Geraniol - FEMA 2507	>= 1 < 3%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318 ATE oral = 3.500,0 mg/kg ATE dermal = 5.000,0 mg/kg ATE inhal = 0,5mg/l/4 h	603-241-00-5	106-24-1	203-377-1	01-2119552 430-49-000 0
Coumarin	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373 ATE oral = 293,0 mg/kg ATE dermal = 242,0 mg/kg	ND	91-64-5	202-086-7	01-2119943 756-26-000 0

**Fractionated global values**

H225 = 67,10	H319 = 25,50	H317 = 9,40	H315 = 8,50
H318 = 1,00	H410 = 1,00	H302 = 0,90	H373 = 0,90
H411 = 2,00	H226 = 1,00		

**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):**

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

**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 skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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

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

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

Advised extinguishing agents:

In the case of fire use: CO<sub>2</sub> or powder extinguisher. Do not use water, it could spread 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 gloves and protective clothing

6.1.2 For emergency responders:

Wear 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  
Do not smoke at work  
At work do not eat or drink.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

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

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:

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

- 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-(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: Geraniol

DNEL

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

## 8.2. Exposure controls

Appropriate engineering controls:

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  
Not needed for normal use.

(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

Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Liquid	
Colour	Purple	
Odour	characteristic	
Odour threshold	not determined	
pH	6	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	17 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	flammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	not determined	
Solubility	not determined	
Water solubility	not determined	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	

Physical and chemical properties	Value	Determination method
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

## 9.2. Other information

Content of VOC ready to use condition: 91,801

## 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

Avoid contact with combustible materials. The product could catch fire. heat, open flames, sparks or hot surfaces.

### 10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, strong reducing agents.  
It can ignite in contact with oxidants mineral acids, elementary metals, nitrides, organic peroxides, organic water peroxides, oxidating and 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 = 32.555,6 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: ethanol: LD50 Oral-rat-7.060 mg/kg

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

LC50 Inhalation-rat-10:0-20000 ppm

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)

2,6-dimethyloct-7-en-2-ol: LD50 Oral - rat - 3,600 mg/kg  
LD50 Dermal - rabbit - > 5,000 mg/kg  
Geraniol: LD50 Oral (rat) (mg / kg body weight) = 3500  
LD50 Dermal (rabbit) (mg / kg body weight) => 5000  
LC50 Inhalation (rat) of vapor / dust / aerosol / smoke (mg / l / 4h): 0.5  
(b) skin corrosion/irritation: ethanol: Skin-rabbit  
Result: Irritating to skin. -12:0 am  
2,6-dimethyloct-7-en-2-ol: Skin - rabbit  
Result: Mild skin irritation - 24 h  
(Draize Test)  
Geraniol: skn-rbt 100 mg/24H SEV  
skn-gpg 100 mg/24H SEV  
skn-man 16 mg/24H SEV  
(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.  
ethanol: Eyes-rabbit  
Result: Mild eye irritation-12:0 am  
(Draize Test)  
Geraniol: Eyes-rabbit  
Result: Risk of serious damage to eyes. -12:00 am  
(Directive 67/548/EEC, Annex V, b. 5.)  
2,6-dimethyloct-7-en-2-ol: Eyes - rabbit  
Result: Moderate eye irritation  
(Draize Test)  
(d) respiratory or skin sensitisation: 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 animal  
Geraniol: Guinea pig  
May cause sensitisation 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: Geraniol: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
(g) reproductive toxicity: 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.  
(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 based on available data, the classification criteria are not met.  
(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

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 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

2,2-dimethyl-1,3-dioxolan-4-ylmethanol:

LD50 (rat) Oral (mg/kg body weight) = 7000

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

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-(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

nerol:

LD50 Oral - rat - 4.500 mg / kg

DL50 Dermal - on rabbit -> 5.000 mg / kg

LD50 (rat) Oral (mg/kg body weight) = 4500

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

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

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

Oral-rat LD50 3810 mg / kg

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

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

LD50 Dermal - rat -> 5.000 mg / kg

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

LD50 (rat) Oral (mg/kg body weight) = 3810

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

3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one:

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

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

cineole:

LD50 (rat) Oral (mg/kg body weight) = 2480

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

Geraniol:

LD50 (rat) Oral (mg/kg body weight) = 3500  
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000  
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,5

**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

**11.2. Information on other hazards**

No data available.

**SECTION 12. Ecological information**

**12.1. Toxicity**

Related to contained substances:

ethanol:

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

2,2-dimethyl-1,3-dioxolan-4-ylmethanol:

C(E)L50 (mg/l) = 16,700001

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-(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

nerol:

C(E)L50 (mg/l) = 2,16

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

3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one:

Rainbow Trout (average length, 5.8 cm), acclimatized for 12 days, were exposed to a series of 5 test concentrations of

0, 7.8, 10.9, 15.3, 21.4, or 30 mg/L dispersed in Polysorbate 80 (10 mg/L) for 96 hours at 17.1 °C. Control fish were exposed to Polysorbate 80 (10 mg/L). Fish were observed twice daily for mortality and symptoms. pH values and water temperature were monitored after substance addition at 24 hour intervals. Dissolved oxygen was measured at the beginning of the experiment and at 96 hours.

LC50 = 10.9 mg/L

Daphnia magna 48h - LC50 = 0.597 mg/L

72 hr EC50=7.47 mg/L based on average specific growth rate;

C(E)L50 (mg/l) = 0,597

cineole:

C(E)L50 (mg/l) = 102

Geraniol:

static test LC50-zebrafish (zebra fish)-ca. 22 mg/l-96 h (OECD Test Guideline 203)

Broadcast application EC50-Daphnia magna (Water flea)-10.8 mg/l-48 h (OECD Test Guideline 202)

Growth inhibition EC50-Desmodesmus subspicatus (green algae)-13.1 mg/l-72 h

C(E)L50 (mg/l) = 10,8

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

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:

Linalool:

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

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

72% within 28 days in an OECD 301B assay

Geraniol:

Aerobic chemical oxygen demand:

Exposure time 3 days

Result: 80 - 100% - Easily biodegradable.

(OECD Test Guideline 301A)

## 12.3. Bioaccumulative potential

Related to contained substances:

Linalool:

106

Coumarin:

Bioaccumulation *Leuciscus idus melanotus* - 3 d -46 µg/l

Bioconcentration factor (BCF): < 10

#### 12.4. Mobility in soil

Related to contained substances:

Linalool:

log Pow: 2.55

Soil adsorption (Koc): 75

Henry's Law constant(PaM<sup>3</sup>/mol): 2

Geraniol:

log Pow: 3.47

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

No PBT/vPvB ingredient is present

#### 12.6. Endocrine disrupting properties

No data available.

#### 12.7. Other adverse effects

No adverse effects

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

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

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

### SECTION 14. Transport information

#### 14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 1993

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 Kg

Inner packagings placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg



#### 14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INFIAMMABILE, N.A.S. (pressione di vapore a 50°C inferiore o uguale a 110 kPa) (etanolo, 1',2',3',4',5',6',7',8'-ottaidro-2',3',8',8'-tetrametil-2'-acetonaftone, Coumarin, 3-metil-4-(2,6,6-trimetilcicloes-2-enil)but-3-en-2-one, Cineolo)

ADR/RID/IMDG: FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50 ° C is not more than 110 kPa) (ethanol, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, Coumarin, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, cineole)

ICAO-IATA: FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50 ° C is not more than 110 kPa) (ethanol, 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, Coumarin, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, cineole)

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

ADR/RID/IMDG/ICAO-IATA: Class : 3  
ADR/RID/IMDG/ICAO-IATA: Label : Limited quantities  
ADR: Tunnel restriction code : D/E  
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L  
IMDG - EmS : F-E, S-E

**14.4. Packing group**

ADR/RID/IMDG/ICAO-IATA: II

**14.5. Environmental hazards**

ADR/RID/ICAO-IATA: Product is not environmentally hazardous  
IMDG: Marine polluting agent : Not

**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:  
P5c - FLAMMABLE LIQUIDS

REGULATION (EU) No 1357/2014 - waste:  
HP3 - Flammable  
HP4 - Irritant — skin irritation and eye damage

**15.2. Chemical safety assessment**

The supplier has made an assessment of chemical safety

**SECTION 16. Other information**

**16.1. Other information**

Points modified compared to previous release: 1.1. Product identifier, 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 5.1. Extinguishing media, 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 14.2. UN proper shipping name, 14.3. Transport hazard class(es), 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

H225 = Highly flammable liquid and vapour.  
H319 = Causes serious eye irritation.  
H315 = Causes skin irritation.

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.  
H226 = Flammable liquid and vapour.  
H318 = Causes serious eye damage.  
H302 = Harmful if swallowed.  
H373 = May cause damage to organs through prolonged or repeated exposure .

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.