

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

### **1.1. Product identifier**

Product code : Hygienfresh Odorblok spray  
Trades code : A32-000QU  
Product line: HygienFresh

UFI: 9PM0-U0XH-V00X-4M1P

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

Professional spray tested with strong action eliminates odors

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. Aerosol 1, Skin Sens. 1B, Eye Irrit. 2, STOT SE 3

Hazard statement Code(s):

H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

Aerosol that ignites easily even at low temperatures, fire risk

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.

Warning: Vapours inhalation may cause sleepiness and giddiness

The repeated inhalation of vapors can cause drowsiness and giddiness.  
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.  
The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

## 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):  
GHS02, GHS07 - Danger



Hazard statement Code(s):  
H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.

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.
- P211 - Do not spray on an open flame or other ignition source.
- P251 - Do not pierce or burn, even after use.
- P261 - Avoid breathing spray.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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.

Storage

- P403 - Store in a well-ventilated place.
- P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal

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

Contains:

butane, isobutane, propane, isopropyl alcohol, alcohol, parfum, zinc ricinoleate, C12-14 parath-3, benzyl salicylate, hexyl cinnamal, hexyl salicylate, tetramethyl acetyloctahydronaphthalenes, geraniol, citronellol, eugenol, coumarin, hydroxycitronellal, linalool, alpha isomethylionone.

Content of VOC ready to use condition: 94,21 %

UFI: 9PM0-U0XH-V00X-4M1P

## 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

Butane contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8)

Note K - The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
Butane Note: K	>= 35 < 50%	Flam. Gas 1A, H220 ATE inhal = 658,0mg/l/4 h	601-004-00-0	106-97-8	203-448-7	01-2119474 691-32
Isobutane	>= 15 < 25%	Flam. Gas 1A, H220 ATE oral = 570.000,0 mg/kg ATE dermal = 570.000,0 mg/kg ATE inhal = 658.000,0mg/l/4 h	601-004-00-0	75-28-5	200-857-2	01-2119485 395-27
Propane	>= 15 < 25%	Flam. Gas 1A, H220; Press. Gas, H280 ATE inhal = 410.000,0mg/l/4 h	601-003-00-5	74-98-6	200-827-9	01-2119486 944-21
Propan-2-ol - FEMA 2929	>= 5 < 10,00%	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
ethanol	>= 1 < 5%	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
Alcohols, C12-14, ethoxylated	>= 0,1 < 1%	Eye Dam. 1, H318; Aquatic Acute 1, H400 ATE oral = 2.000,0 mg/kg	ND	68439-50-9	ND	ND

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
		ATE dermal = 2.000,0 mg/kg ATE inhal = 1,6mg/l/4 h				
Benzyl salicylate	>= 0,1 < 1,00%	Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 1 1 ATE oral = 2.227,0 mg/kg	607-754-00-5	118-58-1	204-262-9	01-2119969 442-31
$\alpha$ -Hexylcinnamaldehyde	>= 0,1 < 1,00%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,0 mg/kg	ND	101-86-0	202-983-3	01-2119533 092-50
Hexyl salicylate - FEMA 0	>= 0,1 < 1,00%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,0 mg/kg ATE dermal = 5.000,0 mg/kg	ND	6259-76-3	228-408-6	01-2119638 275-36-000 2
Geraniol - FEMA 2507	>= 0,1 < 1,00%	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
Citronellol	>= 0,1 < 1,00%	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
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 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
Eugenol	>= 0,1 < 1,00%	Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.000,0 mg/kg	ND	97-53-0	202-589-1	01-2119971 802-33-000 0

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
Coumarin	>= 0,1 < 1,00%	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
7-hydroxycitronellal	>= 0,1 < 1,00%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; Eye Irrit. 2, H319 ATE oral = 5.000,0 mg/kg	ND	107-75-5	ND	ND

**Fractionated global values**

H220 = 85,00	H280 = 18,70	H225 = 9,00	H319 = 9,12
H336 = 7,65	H318 = 0,80	H400 = 1,06	H317 = 1,33
H411 = 0,83	H315 = 0,93	H410 = 0,26	H412 = 0,32
H335 = 0,06	H302 = 0,06	H373 = 0,05	H226 = 0,01
H304 = 0,01	H361 = 0,01	H311 = 0,00	H301 = 0,00
H314 = 0,00			

**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  
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 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.

Call a POISON CENTER/doctor if you feel unwell.

## **SECTION 5. Firefighting measures**

### **5.1. Extinguishing media**

Advised extinguishing agents:

CO2 or dry powder extinguisher

Extinguishing means to avoid:

Direct jets of water

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

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

Manufactured under pressure in sealed metal container (test pressure 15 bar max). Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance ( protect the head using a safety helmet).

### **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:

Move away from the area surrounding the spill or release. Not smoking.

Move away from the surrounding area, remembering that any overheating could throw the cylinder at a considerable distance.

Wear a mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear protective gloves and clothing.

Eliminate all open flames and possible sources of ignition.

Not smoking.

Provide adequate ventilation.

Evacuate the danger area and, if necessary, consult an expert.

### **6.2. Environmental precautions**

Contain spill

Inform the competent 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 the removal.

**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.

Use extreme caution when handling the product. Avoid shock or friction.

In residential areas do not use on large surfaces.

Do not smoke at work

At work do not eat or drink.

Vapors are heavier than air and may spread close to the ground and form explosive mixtures with air. Prevent formation of flammable or explosive concentrations in the air.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately ventilated areas.

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.

Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.

Always store in well ventilated areas.

Never close the container tightly, leave a chance to vent

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:

Butane:

TLV (ACGIH) = 1000 ppm

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s).  
OSHA PEL 1989 (United States, 3/1989).  
TWA: 1900 mg/m 8 hour (s).  
TWA: 800 ppm 8 hour (s).  
Butane EH40 WEL TWA 600 ppm 1.450 mg/m<sup>3</sup>

Isobutane:  
ACGIH TLV (United States, 3/2012).  
TWA: 1000 ppm 8 hour (s).  
NIOSH REL (United States, 1/2013).  
TWA: 1900 mg/m 10 hour (s).  
TWA: 800 ppm 10 hour (s)

Propane:  
TLV: (Aliphatic hydrocarbon gases) 1000 ppm as TWA; (ACGIH 2005).  
ACGIH TLV (United States, 3/2012).  
TWA: 1000 ppm 8 hour (s).  
NIOSH REL (United States, 1/2013).  
TWA: 1800 mg/m 10 hour (s).  
TWA: 1000 ppm 10 hour (s).  
OSHA PEL (United States, 6/2010).  
TWA: 1800 mg/m 8 hour (s).  
TWA: 1000 ppm 8 hour (s).  
OSHA PEL 1989 (United States, 3/1989).  
TWA: 1800 mg/m 8 hour (s).  
TWA: 1000 ppm 8 hour (s)

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

- 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: 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:  $\alpha$ -Hexylcinnamaldehyde  
DNEL  
Systemic effects Long term Workers inhalation = 0,000078 (mg/m<sup>3</sup>)  
Systemic effects Short term Workers inhalation = 0,00628 (mg/m<sup>3</sup>)  
PNEC  
Sweet water = 0,03 (mg/l)  
sediment Sweet water = 47,7 (mg/kg/sediment)  
Sea water = 0,003 (mg/l)  
sediment Sea water = 4,77 (mg/kg/sediment)  
ground = 9,51 (mg/kg ground)

- Substance: Hexyl salicylate  
DNEL  
Systemic effects Long term Workers inhalation = 0,79 (mg/m<sup>3</sup>)  
Systemic effects Long term Workers dermal = 2083 (mg/kg bw/day)  
Systemic effects Short term Workers inhalation = 0,79 (mg/m<sup>3</sup>)  
Systemic effects Short term Workers dermal = 2083 (mg/kg bw/day)

- Substance: Geraniol  
DNEL  
Systemic effects Long term Workers inhalation = 161,6 (mg/m<sup>3</sup>)

- Substance: Citronellol  
DNEL  
Systemic effects Long term Workers inhalation = 161,6 (mg/m<sup>3</sup>)

- 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)

**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  
 Wear mask

(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.  
 Better is to use cotton antistatic clothing

(c) Respiratory protection  
 Work in a sufficiently ventilated to avoid inhaling the product.

(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
Physical state	Aerosol	
Colour	colorless liquid under pressure	
Odour	Characteristic	

Physical and chemical properties	Value	Determination method
Odour threshold	not determined	
Melting point/freezing point	< -100 °C (liquid gas)	
Boiling point or initial boiling point and boiling range	> -42 °C (liquid gas)	
Flammability	flammable	
Lower and upper explosion limit	9,5% vol / 1,8% vol	
Flash point	< -80 °C (liquid gas)	ASTM D92
Auto-ignition temperature	> 400 °C	
Decomposition temperature	not determined	
pH	irrelevant	
Kinematic viscosity	not determined	
Solubility	irrelevant	
Water solubility	not determined	
Partition coefficient n-octanol/water (log value)	undefined	
Vapour pressure	3,2 bar	
Density and/or relative density	0,65 kg/l	
Relative vapour density	> 2 (liquid gas)	
Particle characteristics	irrelevant	
Container volume	520 ml	
Product volume	400 ml	
Pressure to 20°C	3,2 bar	
Deformation pressure	16,5 bar	
Burst pressure of the container	18 bar	
Flash point of liquid phase	< 21 °C	
Propellant inflammability	< 0 °C	

## 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: 94,21 %

## 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 heating the product, it could explode.

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

The aerosol product is stable for a period exceeding 36 months and in normal storage conditions can not take place dangerous reactions as the container is almost hermetically sealed.

To avoid that the metal container can deteriorate, keep away from acidic or basic products. Attention to the heat as temperatures exceeding 50 ° C has increased pressure inside the container that gets to deformation of the cylinder until the outbreak.

### 10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, strong reducing agents.

It can generate toxic gases to contact with oxidants mineral acids, organic peroxides, organic water peroxides.

It can ignite in contact with oxidants mineral acids, organic nitrides, peroxides and water peroxides, strong oxidants 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 = 274.036,7 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

Benzyl salicylate: Oral Rat LD50 = 2227 mg/kg bw

α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 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

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

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

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)

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

Result: Mild skin irritation

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

Benzyl salicylate: Skin - rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Geraniol: skn-rbt 100 mg/24H SEV  
skn-gpg 100 mg/24H SEV  
skn-man 16 mg/24H SEV

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 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.)

Propan-2-ol: Eyes-rabbit

Result: Eye irritation- 24 h

Benzyl salicylate: Eyes - In vitro study

Result: Moderate eye irritation  
(OECD Test Guideline 437)

Eyes - rabbit

Result: Irritating to eyes.  
(Draize Test)

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

Geraniol: Guinea pig

May cause sensitisation by skin contact.

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: 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: Warning: Vapours inhalation may cause sleepiness and giddiness

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

(j) aspiration hazard: Benzyl salicylate: in vivo assay - mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

Related to contained substances:

Butane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658

Isobutane:

LD50 (rat) Oral (mg/kg body weight) = 570000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 570000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658000

Propane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 410000

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).

N O T 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

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

Alcohols, C12-14, ethoxylated:

Oral > LD50 2000 mg/kg (rat)

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) = 1,6

Benzyl salicylate:

LD50 (rat) Oral (mg/kg body weight) = 2227

$\alpha$ -Hexylcinnamaldehyde:

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

Hexyl salicylate:

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

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

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

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

Eugenol:  
LD50 (rat) Oral (mg/kg body weight) = 2000

Coumarin:  
Acute oral LD50 for rats: 293mg/kg  
Acute oral LD50 for mice: 196mg/kg  
Irritant date: 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

7-hydroxycitronellal:  
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:

Butane:  
C(E)L50 (mg/l) = 7,71

Isobutane:  
C(E)L50 (mg/l) = 7,71

Propane:  
C(E)L50 (mg/l) = 7,71

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

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

Alcohols, C12-14, ethoxylated:  
EC50 < 1 mg/l (Literaturwert)  
NOEC/21 d 0.77 mg/l (Daphnia magna)  
C(E)L50 (mg/l) = 0,19

**Benzyl salicylate:**

Zebra fish (*Brachydanio rerio*) 96 hour LC50 = 1.03 mg/L  
48 hour LC50 = 1.4mg/l  
C(E)L50 (mg/l) = 1,03

**α-Hexylcinnamaldehyde:**

Freshwater Fish Toxicity: acute LC50 >1-10 mg/L  
Freshwater Invertebrates Toxicity: acute EC <1 mg/L  
Algal Toxicity: acute EC <1 mg/L.  
C(E)L50 (mg/l) = 0,99

**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

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

Endpoint: LC50 species: *Iepomismacrochirus* (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

**Eugenol:**

Toxicity to fish Lc50-Danio rerio (zebrafish)-13 mg/l-96 h (OECD TEST GUIDELINE 203) Toxicity to daphnia and other aquatic invertebrates – *Daphnia* Ec50-1.13 mg/l-48 h  
C(E)L50 (mg/l) = 1,13

**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

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

## 12.2. Persistence and degradability

Related to contained substances:

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:  
Coumarin:  
Bioaccumulation *Leuciscus idus melanotus* - 3 d -46 µg/l  
Bioconcentration factor (BCF): < 10

### 12.4. Mobility in soil

Related to contained substances:  
Geraniol:  
log Pow: 3.47

### 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

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.

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: 1950

ADR exemption because compliance with the following characteristics:

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

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

### 14.2. UN proper shipping name

ADR/RID/IMDG: AEROSOL infiammabili

ADR/RID/IMDG: AEROSOL flammable

ICAO-IATA: AEROSOL flammable



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

ADR/RID/IMDG/ICAO-IATA: Class : 2  
ADR/RID/IMDG/ICAO-IATA: Label : 2.1 + Limited quantities  
ADR: Tunnel restriction code : D  
ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L  
IMDG - EmS : F-D, S-U

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

ADR/RID/IMDG/ICAO-IATA: --

#### **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:  
P3a - FLAMMABLE AEROSOLS

REGULATION (EU) No 1357/2014 - waste:  
HP3 - Flammable

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**

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, 3.2 Mixtures, 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 6.1. Personal precautions, protective equipment and emergency procedures, 7.1. Precautions for safe handling, 7.2. Conditions for safe storage, including any incompatibilities, 8.1. Control parameters, 8.2. Exposure controls, 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, 13.1. Waste treatment methods, 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

- H220 = Extremely flammable gas.
- H280 = Contains gas under pressure; may explode if heated.
- H225 = Highly flammable liquid and vapour.
- H319 = Causes serious eye irritation.
- H336 = May cause drowsiness or dizziness.
- H318 = Causes serious eye damage.
- H400 = Very toxic to aquatic life.
- H317 = May cause an allergic skin reaction.
- H412 = Harmful to aquatic life with long lasting effects.
- H411 = Toxic to aquatic life with long lasting effects.
- H315 = Causes skin irritation.
- H410 = Very toxic to aquatic life with long lasting effects.
- H335 = May cause respiratory irritation.
- H302 = Harmful if swallowed.
- 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

- H222 - Extremely flammable aerosol. Classification procedure: On basis of test data
- H229 - Pressurised container: May burst if heated. Classification procedure: On basis of test data
- H317 - May cause an allergic skin reaction. Classification procedure: Calculation method
- H319 - Causes serious eye irritation. Classification procedure: Calculation method
- H336 - May cause drowsiness or dizziness. 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.

---