

**SAFETY DATA SHEET**

according to 1907/2006/EC (REACH) Annex II - 2015/830/CE

**1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND THE COMPANY/UNDERTAKING****1.1 Product identifier**

Commercial name: DIFFUSER – VIVO'

Commercial code:

Barcode:

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

Intended use: Ambient air freshener.

**1.3 Company identification**

Name Ugento Srl  
 Full Address / Country Località Fontanelle  
 73059 Ugento -LE-  
 Phone + 39 0833 931002  
 VAT n. 03342840752

e-mail address of the competent person responsible for the Safety Data Sheet:  
 info@vivosaresort.com

**1.4 Emergency telephone number:** Phone + 39 0833 931002 Ugento Srl 9am to 6pm GMT+1.**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

This product is dangerous under Regulation (CE) 1272/2008 (CLP) (and subsequent amendments). Therefore, this product requires a safety data sheet according to the Regulation (EC) 2015/830 and subsequent amendments. You can find further information on health and/or environmental hazards in sections 11 and 12 of this sheet.

Classification and warning information:

Flam. Liq. 2	H225	Highly flammable liquid and vapour.
Eye Irrit. 2	H319	Causes serious eye irritation.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects

**2.2 Label Elements**

Danger labeling under Regulation (CE) 1272/2008 and following amendments and adjustments.

Hazard pictogram(s):



Signal word(s): Danger

Hazard statement(s):

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains: Pin-2 (3) -ene

3-(p-methoxyphenyl)-2-methylpropionaldehyde

Cineole

d-limonene

3R- (3a,3ab,7b,8aa) ) -

(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl) ethan-1-one

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

May produce an allergic reaction.

Precautionary statement(s):

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

P102 Keep out of reach of children.

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

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

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

### 2.3 Other hazards

Based on the available data, the product does not contain PBT or vPvB percentage greater than 0.1%.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable information.

### 3.2 Mixtures

Contains:

Name.	Conc. %.	Classification 1272/2008 (CLP).
<b>ETHANOL</b>		
CAS. 64-17-5	69,945	Flam. Liq. 2 H225, Eye Irrit. 2 H319
CE. 200-578-6		
INDEX. 603-002-00-5		
Reach numb. 01-2119457610-43-XXXX		
<b>3,7-Dimethylnona-1,6-dien-3-ol</b>		
CAS 10339-55-6	1,2	Eye Irrit. 2 H319, Skin Irrit. 2 H315
CE 233-732-6		
INDEX		
Reach numb. 01-2119969272-32-xxxx		
<b>1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one</b>		
CAS 68155-66-8	0,6	Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 1 H410 M=1
CE 915-730-3		
INDEX		
Reach numb. 01-2119489989-04-xxxx		
<b>3R- (3a,3ab,7b,8aa) ) - (2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl) ethan-1-one</b>		
CAS 32388-55-9	0,6	Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
CE 251-020-3		
INDEX		
Reach numb. 01-2119969651-28-xxxx		
<b>2,6-di-tert-butyl-p-cresol</b>		
CAS 128-37-0	0,435	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
CE 204-881-4		
INDEX		
Reach numb. 01-2119480433-40-xxxx		
<b>d-limonene</b>		
CAS 5989-27-5	0,135	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, Note: C
CE 227-813-5		
INDEX 601-029-00-7		
Reach numb. 01-2119529223-47-XXXX		
<b>3-(p-methoxyphenyl)-2-methylpropionaldehyde</b>		
CAS 5462-06-6	0,108	Skin Sens. 1 H317
CE 226-749-5		
INDEX		
<b>4-methyl-3-decen-5-ol</b>		
CAS 81782-77-6	0,108	Aquatic Acute 1 H400 M=1
CE 279-815-0		
INDEX		
Reach numb. 01-2119983528-21-0000		
<b>Pin-2 (3) -ene</b>		
CAS 80-56-8	0,108	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
CE 201-291-9		
INDEX		
<b>Cineole</b>		
CAS 470-82-6	0,108	Flam. Liq. 3 H226, Skin Sens. 1B H317
CE 207-431-5		
INDEX		

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Reach numb. 01-2119967772-24-xxxx

The full text of hazard statements (H) is specified in section 16.

#### **4. FIRST AID MEASURES**

##### **4.1. Description of first aid measures**

**EYES:** Remove contact lenses. Wash immediately with plenty of water for at least 15 minutes, opening the eyes. Consult a doctor if the problem persists.

**SKIN:** Wash immediately with plenty of water. Take off contaminated clothing. If irritation persists, consult a doctor. Wash contaminated clothing before reuse.

**INHALATION:** Move to fresh air. If breathing is difficult, seek medical attention.

**INGESTION:** Consult a doctor immediately. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person unless authorized by the doctor.

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

See section 11 for more detailed information on health effects and symptoms.

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

Seek medical attention when indicated at the paragraph 4.1.

See section 11 for more detailed information on health effects and symptoms.

#### **5. FIREFIGHTING MEASURES**

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

SUITABLE EXTINGUISHING

Extinguishing media are: carbon dioxide, foam, dry chemical. For leakage and spills, water spray may be used to disperse the flammable vapors and protect the people involved in stopping the loss.

EXTINGUISHING MEDIA NOT SUITABLE

Do not use water jet. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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

HAZARDOUS COMBUSTION PRODUCTS

The containers exposed to fire may create high pressure with a risk of explosion. Special hazards during firefighting: Build-up of dangerous/toxic fumes from the substance possible in cases of fire/high temperature. Exposure to decomposition products may be a hazard to health. (oxides of carbon, toxic pyrolysis products, etc.)

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

GENERAL INFORMATION

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

EQUIPMENT

Normal clothing to fight the fire, like an open circuit breathing apparatus with compressed air (EN 137), complete with flame retardant (EN469) flame-resistant gloves (EN 659) and boots Firefighter (HO A29 or A30).

#### **6. ACCIDENTAL RELEASE MEASURES**

##### **6.1. Personal precautions, protective equipment and emergency procedures.**

Do not handle a damaged container or the leaked product without first wearing the appropriate protective equipment. For information on the risks about health and environment, protection of the respiratory track, ventilation and equipment of protection, please refer to other sections of this sheet.

##### **6.2. Environmental precautions.**

Should not be released into the environment. If the product contaminates rivers and lakes or drains inform respective authorities.

##### **6.3. Methods and material for containment and cleaning up.**

Absorb spillage with suitable absorbent material. Assess the compatibility of the container you use with the product, checking section 10. Collect the residual with inert absorbent material.

Ensure adequate ventilation of the area affected by the spillage. Check the incompatibilities for the material of the containers in section 7. Dispose the contaminated material in accordance with section 13.

##### **6.4. Reference to other sections.**

For personal protection, see section 8. For waste disposal, see section 13.

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling.

Keep away from heat, sparks and flames, do not smoke, do not use matches or lighters. Vapors can ignite with explosion, therefore it is necessary to avoid accumulation, keeping the windows and doors open and ensuring a good ventilation. Without adequate ventilation, the vapors may accumulate on the ground and ignite at a distance, if triggered, with danger of backfiring. Avoid the accumulation of electrostatic charges. Connect to a ground in the case of large packages during transfer operations and wear antistatic boots. The strong vigorous stirring and flow of the liquid in the pipes and equipment may cause the formation and accumulation of electrostatic charges. To avoid the danger of fire and explosion, never use compressed air during movement. Open containers with caution, because they may be under pressure. Do not eat, drink or smoke while handling it. Avoid dispersal of the product in the environment.

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

Store only in the original container. Store closed containers in a well ventilated place, away from direct sunlight. Store in a cool, well-ventilated area away from heat, flames, sparks and other sources of ignition. Store containers away from any incompatible materials, and found section 10.

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

The identified uses for this product are detailed in Section 1.2.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

Name	Standard	Country	TWA/8h		STEL/15min	
			mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
ETHANOL	TLV-ACGIH				1884	1000
Butylated hydroxytoluene	TLV-ACGIH		2			
Pin-2 (3)-ene	TLV-ACGIH		111	20		

#### Ethanol

Concentration is not expected to affect the environment - PNEC.

Reference value in fresh water 0.96 mg / l

Reference value in marine water 0.79 mg / l

Reference value for sediment in fresh water 3.6 mg / kg / d

Reference value for sediment in sea water 2.9 mg / kg / d

Reference value for the water, intermittent release 2.75 mg / l

Reference value for microorganisms STP 580 mg / l

Reference value for the terrestrial compartment 0.63 mg / kg / d

Derived No Effect Level (DNEL)

#### Workers

Route(s) of exposure	Acute, local effects	Acute, systemic effects	Long-term, local effects	Long-term - systemic effects
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Inhalation.	1900 mg/m <sup>3</sup>	VND	VND	950 mg/m <sup>3</sup>
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Dermal.			VND	343 mg/kg w/d
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#### PROPYLENE GLYCOL

Concentration is not expected to affect the environment - PNEC.

Reference value in fresh water 260 mg / l

Reference value in marine water 26 mg / l

Reference value for sediment in fresh water 572 mg / kg

Reference value for sediment in sea water 57,2 mg / kg

Intermittent releases 183 mg/l

STP 20000 mg/

Reference value for the terrestrial compartment 50 mg / kg

Derived No Effect Level (DNEL / DMEL)

#### Consumers.

Route(s) of exposure	Acute, local effects	Acute, systemic effects	Long-term, local effects	Long-term - systemic effects
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Oral.			VND	85 mg/kg d
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Inhalation			VND	50 mg/m <sup>3</sup>
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Dermal.			VND	213 mg/kg d
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Butylated hydroxytoluene

Derived No Effect Level (DNEL / DMEL)

Workers.

Route(s) of exposure	Acute, local effects	Acute, systemic effects	Long-term, local effects	Long-term - systemic effects
Oral.	2 mg/kg d			
Inhalation	2 mg/m <sup>3</sup>			

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

Concentration is not expected to affect the environment - PNEC.

Reference value in fresh water 0.0028 mg / l

Reference value in marine water 0.00028 mg / l

Reference value for sediment in fresh water 3.73 mg / kg

Reference value for sediment in sea water 0,75 mg / kg

Reference value for the terrestrial compartment 0.705 mg / kg

Derived No Effect Level (DNEL/DMEL)

Workers.

Possible route(s) of exposure	Acute local	Acute systemic	Long-term local	Long-term systemic
Inhalation		1,76 mg/m <sup>3</sup>		
Dermal.		1,73 mg/kg/d		

3,7-Dimethylnona-1,6-dien-3-ol

Derived No Effect Level (DNEL/DMEL)

Consumers.

Route(s) of exposure	Acute, local effects	Acute, systemic effects	Long-term, local effects	Long-term - systemic effects
Oral.			VND	0,2 mg/kg d
Dermal.			VND	1,4 mg/kg d

Workers

Route(s) of exposure	Acute, local effects	Acute, systemic effects	Long-term, local effects	Long-term - systemic effects
Dermal.			VND	2,7 mg/kg d

Legend:

(C) = CEILING; INALAB = Inhalable fraction; RESPIR = Respirable fraction; Torac = Fraction Thoracic.

VND = hazard identified but no DNEL / PNEC available; NEA = no anticipated exposure; NPI = no danger identified.

## 8.2. Exposure controls.

The use of appropriate technical measures should always take priority over personal protection equipment. Ensure good ventilation at the workplace through effective local aspiration. While using the product refer to the label's information for hazard details. If these operations don't keep the concentration of the product below the exposure limits in the workplace, wear a suitable protection for the respiratory tract. When selecting personal protective equipment if necessary, request advice from the chemical supplier.

### HAND PROTECTION

Protect your hands with gloves and Category III (ref. Directive 89/686/EEC and standard EN 374), such as PVC, neoprene, nitrile, or equivalent. Final selection of glove material must be considered work: degradation, breakage times and permeation. In the case of mixture the resistance of protective gloves should be checked before use, as it can be unpredictable. The gloves have a time limit depends on the duration of exposure.

### SKIN PROTECTION

Wear work clothes with long sleeves and safety shoes for professional use category I (ref. Directive 89/686/EEC and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

### RESPIRATORY EQUIPMENT

In case of exceeding the threshold value (eg. TLV-TWA) of the substance or one or more of the substances present in the product, you should wear a mask with filter type AX whose usage limit will be defined by the manufacturer (ref. EN 14387). If they were present gases or vapors of different kind and / or gases or vapors with particles (aerosols, fumes, mists, etc.) should be provided filters combined type. The use of means of respiratory protection is necessary in case the technical measures taken are not sufficient to limit worker exposure to threshold values considered. The protection provided by masks is limited. In the case in which the substance in question is odorless or its olfactory threshold is higher than the relative TLV-TWA, and in case of emergency, to wear a compressed air breathing apparatus open circuit (ref. Standard EN 137) or breathing apparatus with outside air (ref. standard EN 138). For the correct choice of respiratory protection device, refer to EN 529.

### EYE PROTECTION

Safety glasses with side-shields (frame goggles, EN 166).

### ENVIRONMENTAL EXPOSURE CONTROLS.

Emissions from production processes, including those from ventilation should be controlled in order to respect the environmental protection legislation. Do not discharge product residue without control in waste water or water course.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

Appearance: Liquid

Colour: Coloured

Odour: Typical

Odor Threshold: Not determined

pH: Not determined

Melting point (°C): Not determined

Initial boiling point and boiling range: > 81°C.

Flash point: > 13°C.

Evaporation Rate: Not determined

Gas / Solid Flammability: Not determined

Flammability Limit - Lower(%): Not determined

Flammability Limit - Upper(%): Not determined

Explosive properties: Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Specific gravity: 0,8 – 0,9 Kg/l

Solubility: Miscible in water

Partition Coefficient (N-Octanol/Water): Not determined

Auto Ignition Temperature (°C): Not determined

Decomposition temperature (°C): Not determined

Viscosity: Not determined

Oxidizing properties: Not determined

**9.2. Other information.**

None.

**10. STABILITY AND REACTIVITY****10.1. Reactivity.**

There are no known reactivity hazards associated with this product.

**10.2. Chemical stability.**

Stable under normal temperature conditions and recommended use.

**10.3. Possibility of hazardous reactions.**

Vapors may form explosive mixtures with air.

ETHANOL: risk of explosion by contact with: alkali metals, alkaline oxides, calcium hypochlorite, sulfur monofluoride, acetic anhydride (with acids), concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercuric nitrate, nitric acid, silver and nitric acid, silver nitrate, silver nitrate and ammonia, silver oxide and ammonia, strong oxidizing agents, nitrogen dioxide. May react dangerously with: acetylene bromine, chlorine acetylene, bromine trifluoride, chromium trioxide, cromil chloride, oxiranes, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, platinum black, chloride, zirconium (IV) iodide, zirconium (IV). Forms explosive mixtures with air.

**10.4. Conditions to avoid.**

Avoid overheating. Avoid the accumulation of electrostatic charges. Avoid all sources of ignition.

ETHANOL: avoid exposure to sources of heat and open flames.

**10.5. Incompatible materials.**

Butylated hydroxytoluene

Avoid contact with: oxidizing agents.

**10.6. Hazardous decomposition products.**

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

**11. TOXICOLOGICAL INFORMATION**

In the absence of experimental toxicological data on the product itself, the potential risks of the product to health were evaluated according to properties of substances, according to criteria provided by the reference standard for the classification. Consider, therefore, the concentration of each substance dangerous possibly mentioned in sect. 3, to evaluate the toxicological effects from exposure to the product.

**11.1. Information on toxicological effects.**Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Immediate, delayed and chronic effects and effects from short and long term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) Mixture: Not classified (no relevant component).

LD50 (Oral) Mixture Not classified (no relevant component).

LD50 (Dermal) Mixture: Not classified (no relevant component).

ETHANOL

LD50 (Oral). &gt; 5000 mg / kg Rat

LC50 (inhalation). 120 mg / l / 4h Pimephales promelas

Pin-2 (3) -ene

LD50 (Oral) 3500 mg/kg Rat

Butylated hydroxytoluene

LD50 (Oral) &gt; 2000 mg/kg Rat

LD50 (dermal) &gt; 2000 mg/kg Rabbit

3R- (3a,3ab,7b,8aa) ) - (2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl) ethan-1-one

LD50 (Oral) 4500 mg/kg Rat

LD50 (Dermal) &gt; 5000 mg/kg Rabbit

SKIN CORROSION/IRRITATION

Based on available data the classification criteria are not met.

SERIOUS EYE DAMAGE/EYE IRRITATION

Causes serious eye irritation.

RESPIRATORY OR DERMAL SENSITIZATION

May produce an allergic reaction.

Contains:

Pin-2 (3) -ene

3-(p-methoxyphenyl)-2-methylpropionaldehyde

Cineole

d-limonene

3R- (3a,3ab,7b,8aa) ) - (2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl) ethan-1-one

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

GERM CELL MUTAGENICITY

Based on available data the classification criteria are not met.

CARCINOGENICITY

Based on available data the classification criteria are not met.

REPRODUCTIVE TOXICITY

Based on available data the classification criteria are not met.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)

Based on available data the classification criteria are not met.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)

Based on available data the classification criteria are not met.

ASPIRATION HAZARD

Based on available data the classification criteria are not met.

## 12. ECOLOGICAL INFORMATION

This product is dangerous for the environment and is harmful to aquatic organisms with long-term adverse effects the aquatic environment.

### 12.1. Toxicity.

Set out below is the information available for ethanol.

Pisces (salmo gairdneri) LC50 = 13 g / l (96 hours)  
(pimephales promelas) LC50 = 13.5 - 15.3 g / l (96 hours)  
Invertebrates (Daphnia magna) EC50 = 12.3 g / l (48 hours)  
(Ceriodaphnia dubia) EC50 = 5 g / l (48 hours)  
(daphnia magna) NOEC > 10 mg / l (play, 21 g)  
(Ceriodaphnia dubia) NOEC = 9.6 mg / l (play, 10 g)  
(Palaemonetes pugio) NOEC = 79 mg / l (development, 10 g):  
(artemia salina) EC50 > 10 g / l (24 hours)  
(artemia salina nauplii) EC50 = 857 mg / l (48 hours)  
Algae (chlorella vulgaris) EC50 = 275 mg / l (72 hours)  
(selenastrum capricornutum) EC50 = 12.9 g / l (72 hours)  
(chlamydomonas eugametos) EC50 = 18 g / l (48 hours)  
(chlamydomonas eugametos) NOEC = 7.9 g / l  
(skeletonema costatum) NOEC = 3.2 g / l (5 g)

d-limonene

LC50 - Fish 35 mg/l/96h Oncorhynchus mykiss  
EC50 - Crustaceans 69,6 mg/l/48h Daphnia pulex  
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8-tetramethyl-2-naphthyl)ethan-1-one  
Toxicity to bacteria:  
Endpoint: NOEC > 100 mg/l - Duration h: 42.  
Butylated hydroxytoluene  
LC50 - Fish 0,464 mg/l/96h Brachydanio rerio  
EC50 - Crustaceans 0,84 mg/l/48h Daphnia magna  
EC50 - Algae / Aquatic Plants 0,577 mg/l/72h Scenedesmus subspicatus  
4-methyl-3-decen-5-ol  
LC50 - Fish 3 mg/l/96h Echa  
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8-tetramethyl-2-naphthyl)ethan-1-one  
LC50 - Fish 1,3 mg/l/96h  
EC50 - Crustaceans 1,38 mg/l/48h Dafnie  
EC50 - Algae / Aquatic Plants 2,6 mg/l/72h  
NOEC Chronic Fish 0,16 mg/l  
NOEC Chronic Crustaceans 0,22 mg/l Dafnie

### 12.2. Persistence and degradability.

ETHANOL

Solubility in water. mg / l 1000-10000

Readily Biodegradable.

d-limonene

Material is readily biodegradable.

Solubility in water. mg/l 0,1 – 100

### 12.3. Bioaccumulative potential.

ETHANOL

Partition coefficient: n-octanol / water. -0.35

On the basis of the partition coefficient n-octanol / water, ethanol has a low potential for bioaccumulation.

d-limonene

Partition coefficient: n-octanol / water. 4.38

BCF 1022

### 12.4. Mobility in soil.

Release to Air or water: ethanol and volatile and soluble in water and is rapidly dispersed.

Release in the soil or sediment: Ethanol and poorly absorbed and evaporates at a rapid rate.



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

Based on the available data, the product does not contain PBT or vPvB percentage greater than 0.1%.

#### 12.6. Other adverse effects.

ETHANOL

As a volatile organic compound in the atmosphere, ethanol potentially contributes to the formation of tropospheric ozone in some conditions, however its potential to create photochemical ozone is considered from moderate to low (OECD, 2004).

#### 13. DISPOSAL CONSIDERATIONS

##### 13.1. Waste treatment methods.

Recycle if possible. Product residues are considered special waste. The hazard must be evaluated according to applicable regulations. Disposal should be entrusted to an authorized waste management, in compliance with national and local applicable regulations.

CONTAMINATED PACKAGING

Dispose of waste and residues in accordance with local authority requirements.

#### 14. TRANSPORT INFORMATION

##### 14.1. UN number.

ADR / RID, IMDG, IATA: 1266

##### 14.2. Proper shipping name.

ADR / RID: PERFUMERY PRODUCTS

IMDG: PERFUMERY PRODUCTS

IATA: PERFUMERY PRODUCTS

##### 14.3. Classes Transport hazard.

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

##### 14.4. Packaging group.

ADR / RID, IMDG, IATA: II

##### 14.5. Environmental hazards.

ADR / RID: NO.

IMDG: NO.

IATA: NO.

*For air transportation, the environmental hazard is mandatory only for UN 3077 and 3082.*

##### 14.6. Special precautions for users.

ADR / RID: HIN - Kemler: 33 Limited Quantities 5 L Tunnel restriction code (D/E)

Special Provision: -

IMDG: EMS: F-E, S-D Limited Quantities 5 L

IATA: Cargo: Maximum quantity: 60 L Packaging instructions: 364

Pass.: Maximum quantity: 5 L Packaging instructions: 353

Special Instructions: A3, A72

##### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Not relevant information.

#### 15. REGULATORY INFORMATION

##### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions relating to the product or contained substances based on Annex XVII, Regulation (EC) 1907/2006.

Product.

Point. 3 – 40

Candidate List substances(Art. 59 REACH).

Based on available data, the product does not contain SVHC substances greater than 0.1%.

Substances Subject authorization (annex XIV REACH).

None.

Substances subject to export notification Reg. (EC) 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

### 15.2. Chemical Safety Assessment

A chemical safety assessment for the following contained substances has been carried out:

ETHANOL, 3,7-Dimethylnona-1,6-dien-3-ol, 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 3R-(3a,3ab,7b,8aa) - (2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl) ethan-1-one, 2,6-di-tert-butyl-p-cresol, d-limonene, 4-methyl-3-decen-5-ol, Cineole.

### 16. OTHER INFORMATION

Text of -H- phrases quoted in section 2-3 of the sheet.

Flam. Liq. 2: Flammable liquid, class 2

Flam. Liq. 3: Flammable liquid, class 3

Asp. Tox. 1: Aspiration hazard, class 1

Eye Irrit. 2 Eye irritation, category 2

Skin Irrit. 2: Skin irritation, class 2

Skin Sens. 1: Skin sensitization, class 1

Skin Sens. 1B: Skin sensitization, class 1B

Aquatic Acute 1: Hazardous to the aquatic environment, class 1

Aquatic Chronic 1: Hazardous to the aquatic environment, class 1

Aquatic Chronic 3: Hazardous to the aquatic environment, class 3

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

#### LEGEND:

- ADR: European Agreement concerning the transport of dangerous goods by road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration that gives effect to 50% of the population subject to testing
- EC NUMBER: ID number in ESIS (European archive of existing substances)
- CLP: Regulation EC 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System for the classification and labeling of chemicals
- IATA DGR: Regulation for the transport of dangerous goods by the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subject to testing
- IMDG: International Maritime Code for Dangerous Goods
- IMO: International Maritime Organization
- INDEX NUMBER: ID number in Annex VI of the CLP
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted Environmental Concentration
- PEL: predictable level of exposure
- PNEC: Predicted No Effect Concentration
- REACH Regulation EC 1907/2006
- RID: Regulations concerning the international carriage of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration which should not be exceeded during any time of occupational exposure.
- TWA STEL: Short Term Exposure Limit
- TWA: Time-weighted Average limit value
- VOC: Volatile Organic Compound
- VPvB: Very persistent and very bioaccumulative according to REACH

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- WGK: Water hazard class (Germany).

**GENERAL BIBLIOGRAPHY:**

1. Regulation (EU) 1907/2006 of the European Parliament (REACH)
2. Regulation (EU) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EU) 453/2010 of the European Parliament
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII CLP)
12. Regulation (UE) 2016/1179 of the European Parliament (IX Atp. CLP)
13. Regulation (UE) 2017/776 of the European Parliament (X Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Web Site Agency ECHA
- Web Site IFA GESTIS

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.