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## MATERIAL SAFETY DATA SHEET

According to Regulation (EU) No 1272/2008 and  
Regulation (EC) No 1907/2006 (REACH), as amended by (EU) 2020/878

### Organic Rose Geranium Oil

Version 02:

Date of creation: 10.07.2021

Supersedes the version from: 10.07.2021

Date of new version: 18.10.2023

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

##### 1.1. Product Identifiers

Product name	:	Organic Rose Geranium Oil
Substance name (INCI)	:	PELARGONIUM ROSEUM LEAF OIL
Botanic name	:	Pelargonium graveolens var. roseum
CAS No	:	90082-55-6
EO No	:	290-144-2
Biological origin	:	The oil is extracted from the fresh above-ground organs (leaves, branches, blooms of subtropical and tropical perennial semishrubs Pelargonium Roseum Wild, Pelargonium Roseum, Geraniaceae).

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

Use of substance/mixture	:	For application in food industry, perfumery and cosmetics by itself or as a formulation constituent, a part of composition.
Recommended restrictions on use	:	No data available.

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

<u>Manufacturer</u>	:	ALTEYA ORGANICS LLC
<u>Mailing address/Postal code</u>	:	6167, village of Yagoda, 1, Rozovarna St.
<u>Country identifier/</u>		
<u>Postal code/city or town</u>	:	Bulgaria
<u>Telephone/Mobile/Fax</u>	:	+359 700 15 502
<u>E-mail of the competent person responsible for the Safety Data Sheet</u>	:	<a href="mailto:salesbg@alteya.com">salesbg@alteya.com</a>
<u>National contact person</u>	:	Kaloyan Stoev



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#### 1.4. Emergency telephone number

Clinic of Toxicology at MPHATEM N.I. Pirogov

Emergency telephone number: 02 9154409; (regular working time, Saturdays and Sundays excluded) or 02 9154 346 (24h service, all week)

e-mail: [poison\\_centre@mail.orbitel.bg](mailto:poison_centre@mail.orbitel.bg)

<http://www.pirogov.net>

### 2. Hazards Identification

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

##### 2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification according GHS				
Chapter	Subsection	Class of hazard	Class of hazard and category of hazard	Hazard statements
3.2	Skin	Skin irritation	Corrosion/irritation 2	H315
3.4	Sens.	Skin sensitization	(Skin sens 1)	H317
3.3	Eye	Eye irritation	(Corrosion) Damage/Irritation. 1	H318
3.5	Germ. cell	It is supposed to cause genetic defects.	Muta.2	H341
3.6	Carc.	It is supposed to cause cancer	Carc.2	H351
4.1	Chronic	Hazardous for aquatic environment	Aquatic Chronic 3	H412

##### 2.1.2. Additional information:

For full text of hazard statements and EC specific hazard statements: see SECTION 16.

#### 2.2. Label Elements

Designation according Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



GHS07 GHS05 GHS08

Signal word

: Hazardous

Hazard statements

: H315 Causes skin irritation

H317 May cause allergic skin reaction

H318 Causes serious eye damage

H341 It is supposed to cause genetic effects

H351 It is supposed to cause cancer

H412 Harmful for aquatic life with long-lasting effect

EUH 208 Contains beta-Myrcene, para-Cymene, Methyl



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Eugenol, alpha-Pinene, beta-Pinene, Limonene, Linalool, Menthol, Terpineol, Citronellol, Citral, Geraniol, Eugenol, Geranyl Acetate, Beta-Caryophyllene, Farnesol

May cause allergic reaction.

### **Safety recommendations**

#### Safety recommendations

- General

P101 If medical advice is necessary have with you the package or the label of the product.

P102 Keep out of reach of children

#### Safety recommendations

- Prevention

P273 Avoid release to the environment

P280 Use protective gloves/protective goggles

#### Safety recommendations

- As a reaction

P305+ P351 If contact with eyes: Rinse carefully with water for several minutes. Remove contact lenses if there are such and if possible. Continue rinsing.

+338 P310 Immediately call Toxicology Center/a physician/...

P302 + P352 IF CONTACT WITH SKIN: Wash with plenty of water/...

P264 Thoroughly wash hands after handling

P333 + P313 In case skin irritation or rash occurs: Seek medical advice/help.

#### Safety recommendations

- In discharge

P405 Keep under lock and key.

P501 Dispose of contents/container in an approved place and in compliance with the local and national regulations.

### **2.3. Other hazards**

No other information available.

### **3. Composition/information on ingredients**

#### **3.1. Substances**

<b>INGREDIENT</b>	<b>IDENTIFIERS</b>	<b>%</b>	<b>CLASSIFICATION</b>
PELARGONIUM ROSEUM LEAF OIL	EINECS NO: 290-144-2 CAS NO: 90082-55-6	100,0	   <b>DANGER</b> Skin Irrit. Cat.2, H315 Skin Sens. 1B H317 Eye Irrit. 1, H318 Muta. 2 H341



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			<i>Carc. 2 H351</i> <i>Aquatic Chronic 3 H412</i>
$\alpha$ -PINENE	EINECS NO: 201-291-9 CAS NO: 80-56-8	0,6 – 0,7	<i>Flam. Liq. 3, H226</i> <i>Asp. Tox. 1, H304</i> <i>Skin Irrit. 2, H315</i> <i>Skin Sens. 1, H317</i> <i>Aquatic Chronic 1, H400</i> <i>Aquatic Chronic 1, H410</i>
<i>beta</i> -Pinene	EINECS NO: 204-872-5 CAS NO: 127-91-3	0,1 - 0,2	<i>Flam. Liq. 3, H226</i> <i>Asp. Tox. 1, H304</i> <i>Skin Irrit. 2, H315</i> <i>Skin Sens. 1, H317</i> <i>Aquatic Chronic 1, H400</i> <i>Aquatic Chronic 1, H410</i>
ALPHA-PHELLANDRENE	EINECS NO: 202-792-5 CAS NO: 99-83-2	< = 0,2	<i>Flam. Liq. 3 – H226</i> <i>Acute Tox. 4 H302</i> <i>Skin Irrit. 2 – H315</i> <i>Eye Irrit. 2, H319</i> <i>Asp. Tox.1 H334</i> <i>STOT SE 3, H335</i>
BETA - MYRCENE	EINECS NO: 204-622-5 CAS NO: 123-35-3	< 0,3	<i>Flam. Liq. 3 - H226</i> <i>Asp. Tox. 1, H304</i> <i>Skin Irrit. 2 – H315</i> <i>Eye Irrit. 2 - H319</i>
P-CYMENE	EINECS NO: 202-796-7 CAS NO: 99-87-6	< 0,5	<i>Flam. Liq. 3 – H226</i> <i>Skin Irrit. 2 – H315</i> <i>Eye Irrit. 2 - H319</i> <i>STOT SE 3, H335</i> <i>Asp. Tox. 1 - H304</i>
$\gamma$ -Terpinene (GAMMA-TERPINENE)	EINECS NO: 202-794-6 CAS NO: 99-85-4	< 0,1	<i>Flam. Liq. 3; H226</i> <i>Repr. 2; H361d</i> <i>Aquatic Chronic 2, H411</i>
LIMONENE	EINECS NO: 227-813-5 CAS NO: 5989-27-5	0,5 – 0,6	<i>Flam. Liq. 3 – H226</i> <i>Skin Irrit. 2 – H315</i> <i>Skin Sens. 1 – H317</i> <i>Asp. Tox. 1 - H304</i> <i>Aquatic Acute 1 – H400</i> <i>Aquatic Chronic 1 – H410</i>
METHYL EUGENOL	EINECS NO: 202-223-0 CAS NO: 93-15-2	1,2282	<i>Acute Tox.4 H302</i> <i>Muta.2 H341</i> <i>Carc.2 H351</i> <i>Aquatic Chronic2 H411</i>
LINALOOL	EINECS NO: 201-134-4 CAS NO: 78-70-6	5,0 – 6,2	<i>Acute Tox. Oral 5 (H303)</i> <i>Eye Irrit. 2A (H319)</i> <i>Flam. Liq. 4 (H227)</i> <i>Aquatic Acute 3 (H402)</i> <i>Skin Sens. 1B (H317)</i> <i>Skin Irrit. 2 (H315)</i>
CITRONELLOL	EINECS NO: 203-375-0 /	24,0 – 31,7	<i>Skin irrit, Cat. 2, H315</i>



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	247-737-6 / 231-415-7 / 214-250-5 CAS NO: 106-22-9 / 26489-01-0 / 7540-51-4 / 1117-61-9		<i>Skin sens, Cat. 1, H317</i> <i>Aquatic Chronic 2, H411</i>
GERANIOL	EINECS NO: 203-377-1 CAS NO: 106-24-1	16,0 – 18,5	<i>Skin Irrit. 2 – H315</i> <i>Eye Dam. 1 - H318</i> <i>Skin Sens. 1 – H317</i>
EUGENOL	EINECS NO: 202-589-1 CAS NO: 97-53-0	0,4 – 0,5	<i>Asp. Tox. 1, H304</i> <i>Eye Irrit. 2 - H319</i> <i>Skin Sens. 1 – H317</i>
$\alpha$ -Humulene	EINECS NO: 229-816-7 CAS NO: 6753-98-6	0,1 – 1,0	<i>Skin Irrit. 2 (H315)</i> <i>Eye Irrit. 2 - H319</i> <i>STOT SE 3, H335</i>
GERANYL ACETATE	EINECS NO: 203-341-5 CAS NO: 105-87-3	0,8 – 1,0	<i>Skin Irrit. Cat.2, H315</i> <i>Eye .irrit, Cat. 2A; H319</i> <i>Aquatic Chronic 4, H412</i>
MENTHOL	EINECS NO: 201-939-0/ 216-074-4/ 218-690-9/ 239- 387-8 CAS NO: 89-78-1 / 1490- 04-6 / 2216-51-5 / 15356- 60-2	0,2 – 0,3	<i>Skin Irrit. Cat.2, H315</i> <i>Eye .irrit, Cat. 2A; H319</i>
TERPINEOL	EINECS NO: 232-268- 1/202-680-6/205-342- 6/209-584-3 CAS NO: 8000-41-7/98- 55-5/138-87-4/586-81-2	0,1 – 0,8	<i>Skin Irrit. 2, H315</i> <i>Eye .irrit, Cat. 2A; H319</i>
CITRAL	EINECS NO: 226-394-6 CAS NO: 5392-40-5	0,1 – 1,0	<i>Skin Irrit. 2, H315</i> <i>Eye .irrit, Cat. 2A; H319</i> <i>Skin Sens. 1 – H317</i>
BETA-CARYOPHYLLENE	EINECS NO: 203-205-5 CAS NO: 104-46-1	1,0 – 2,9	<i>Asp. Tox. 1, H304</i> <i>Skin Sens. 1, H317</i>
FARNESOL	EINECS NO: 226-004-1 CAS NO: 4602-84-0	0,1 - 0,2	<i>Skin Irrit. 2 – H315</i> <i>Skin Sens. Cat.1, H317</i> <i>Eye Irrit. 2A H319</i>

#### 4. First Aid Measures

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



- General notes : In case of sickness seek medical advice (if possible show the label).

- Following inhalation : No data available.



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- Following skin contact : Remove the contaminated clothing. Wash the affected area with plenty of water, if possible cool.
- Following eye contact : Immediately start rinsing the eyes with plenty of water for at least 10 min. If symptoms persist (irritation, hotness) seek medical advice.
- Following ingestion : Immediately seek medical advice and present the package or the label. Don't give anything by mouth to an unconscious person and do not cause vomiting. In case the person is conscious he/she should rinse his/her mouth with water.

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

- If contact with skin : May cause allergic skin reaction.
- If contact with eyes : Causes serious eye damage.
- If swallowed : Irritation, nausea

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

- Treatment : Treat symptomatically.

### **5. Fire-fighting Measures**

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

- Suitable extinguishing media : Alcohol resistant foam, carbon dioxide, powder, water jet, water mist.
- Unsuitable extinguishing media : Water – high pressure jet.

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

- Specific hazards : In case of fire carbon and toxic gases may be released.

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

- Special protective equipment for firefighters : Use self-contained breathing apparatus and protective clothing for the body as a whole. Closed containers filled with the product near the fire should be cooled with water. Avoid penetration of the fire extinguishing material fire in sewer systems, surface and underground waters.



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Additional data : No information available.

## 6. Accidental Release Measures

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

#### 6.1.1. For personnel not responsible for emergencies

Stop leakage, if you can do it without any risk. Use personal protective equipment at work. Follow the instructions in Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

*For firefighters:* Firefighters should be equipped with adequate personal protective equipment (see section 8). High temperature can increase pressure in the container - cool the container spraying water. Avoid inhaling the released vapors.

#### 6.1.2. For the persons responsible for emergencies

Personal protective equipment : Maintain good professional and personal hygiene. Avoid inhaling the vapors of the product and the contact with the skin and the eyes.

### 6.2. Environmental precautions

Environmental precautions : Avoid penetration in sewer system. Avoid contamination of soil and surface and underground waters.

### 6.3. Methods and materials for containment and cleaning up

6.3.1. For containment : The spilled product should be covered with suitable (non-combustible) absorbing material (sand, desmid earth, soil or other suitable absorbing materials).

6.3.2. For cleanup : Collect in tightly closed containers and dispose of in accordance with the instructions in Section 13. In case of leakage of small quantity of the material inform the firefighting services and the other competent authorities. After removing the product wash the contaminated area with plenty of water. Do not use solvents.

### 6.4. Reference to other sections

See sections 7, 8 and 13.



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## 7. Handling and Storage

### 7.1. Precautions for safe handling

Precautions	:	Work following the rules of the good industrial hygiene and safety measures. Avoid accidental contact with skin surfaces. Wear adequate protective clothing. Avoid inhaling. Prevent eye contact. Always wash hands after handling. Remove and wash the contaminated clothing before re-use.
Fire-fighting measures	:	Keep away from heat. Keep away from ignition sources.
Measures to avoid transformation into aerosols and powder	:	Use adequate ventilation or exhaust gases at the operation area.
Hygiene measures	:	Wash your hands before breaks and at the end of the working day. Avoid eye contact.

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

Technical measures and storage conditions	:	Store in full tightly closed containers, away from heat, light other ignition sources at temperature of 15-25°C. To store the oil for a shorter periods of time containers of galvanized sheet metal should be used and for longer period storage – glass containers or containers with varnish coating of the inner surface.
Incompatible materials	:	Do not store near heat, sparks, naked flame, strong acids. When not in use keep the container tightly closed.
Packing materials	:	Always keep in packages preserving the integrity and the quality of the product.
Storage class	:	No information available.
Additional information on conditions of storage	:	No information available.



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**Recommendations for protection**

from fire and explosions

: Keep away from ignition sources and naked flame.

Recommendations for primary storage

: Use the good professional practices and occupational hygiene practices providing adequate ventilation for the operational area. Maintain good personal hygiene and do not eat, drink and smoke at work.

**It is recommended to follow the requirements on packing and storage according to ISO/TS 210:2015.**

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

Recommendations	:	Before using read the label.
Solutions specific to the industry sector	:	No information available.
Specific use(s)	:	Used in food industry, perfumery and cosmetics by itself or as a formulation constituent, a part of composition.
Additional information	:	Follow the regulation relative to the application: *Therapeutic Products Act in case they are advertised as medications and medical products. *Food Law and its regulations if advertised as dietary Supplement *The cosmetics product regulations if advertised as Cosmetics (for instance perfume, highly diluted essential oils or bath supplements) *Animal Feed Ordinance if advertised as feed supplement. *Biocides Ordinance if advertised as insect repellants. *In all other cases they are subject to Chemicals Ordinance.

**8. Exposure controls/Personal protection equipment**

**8.1. Control parameters**

**Other occupational exposure limits**

**Information on monitoring procedures**

**Relevant DNEL-/DMEL-/PNEC and other threshold levels**



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**$\alpha$ -Pinene**

GB cycloalkanes (>C7) 80-56-8 WEL 800 EH40/2005

**$\beta$ -Pinene**

DNEL 5,69 mg/m<sup>3</sup> human, inhalatory worker (industry) chronic - systemic effects

DNEL 0,8 mg/kg bw/day human, dermal worker (industry) chronic - systemic effects

DNEL 54  $\mu$ g/cm<sup>2</sup> human, dermal worker (industry) chronic – local effects

**Geranyl acetate 105-87-3**

Geranyl acetate 105-87-3 DNEL 62.59 mg/m<sup>3</sup> human, inhalatory worker (industry) chronic - systemic effects

Geranyl acetate 105-87-3 DNEL 35.5 mg/kg bw/day human, dermal worker (industry) chronic - systemic effects

**(R)-p-Mentha-1,8-diene** - Index: NA, CAS: 5989-27-5, EC No: 227-813-5

TLV TWA - TLV STEL- VLE 8h- VLE short: None.

**Menthol**

DNEL 132 mg/m<sup>3</sup> human, inhalation industrial worker chronic - systemic effects

DNEL 10 mg/m<sup>3</sup> human, inhalation industrial worker chronic - local effects

DNEL 10 mg/m<sup>3</sup> human, inhalation industrial worker acute - local effects

Relevant DNEL- mixture components

DNEL 19 mg/kg bw/day, human, dermal industrial worker chronic - systemic effects

**Citral**

DNEL 9 mg/m<sup>3</sup> human, inhalation industrial worker chronic - systemic effects

DNEL 1,7 mg/kg bw/day, human, dermal industrial worker chronic - systemic effects

DNEL 140  $\mu$ g/cm<sup>2</sup> human, dermal industrial worker chronic - local effects

**( $\pm$ )- $\beta$ -Citronellol 106-22-9**

( $\pm$ )- $\beta$ -Citronellol 106-22-9 DNEL 161.6 mg/m<sup>3</sup> human, inhalatory worker (industry) chronic - systemic effects

( $\pm$ )- $\beta$ -Citronellol 106-22-9 DNEL 10 mg/m<sup>3</sup> human, inhalatory worker (industry) chronic - local effects

( $\pm$ )- $\beta$ -Citronellol 106-22-9 DNEL 10 mg/m<sup>3</sup> human, inhalatory worker (industry) acute - local effects

( $\pm$ )- $\beta$ -Citronellol 106-22-9 DNEL 327.4 mg/kg bw/day human, dermal worker (industry) chronic - systemic effects

( $\pm$ )- $\beta$ -Citronellol 106-22-9 DNEL 2,950  $\mu$ g/cm<sup>2</sup> human, dermal worker (industry) acute - local effects

**Geraniol**

DNEL 161,6 mg/m<sup>3</sup> human, inhalation industrial worker chronic - systemic effects

DNEL 12,5 mg/kg bw/day, human, dermal industrial worker chronic - systemic effects

DNEL 11.800  $\mu$ g/cm<sup>2</sup> human, dermal industrial worker chronic - local effects



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### Relevant PNEC - and other threshold levels

#### ***Geraniol***

*PNEC 0,011 mg/l aquatic organisms freshwater short-term (instant)  
PNEC 0,001 mg/l aquatic organisms marine water short-term (instant)  
PNEC 0,7 mg/l aquatic organisms sewage treatment plant (STP) short-term (instant)  
PNEC 0,115 mg/kg aquatic organisms freshwater sediment short-term (instant)  
PNEC 0,011 mg/kg aquatic organisms marine sediment short-term (instant)  
PNEC 0,017 mg/kg terrestrial organisms soil short-term (instant)*

#### ***Linalool***

*PNEC 0,2 mg/l aquatic organisms freshwater short-term (instant)  
PNEC 0,02 mg/l aquatic organisms marine water short-term (instant)  
PNEC 10 mg/l aquatic organisms sewage treatment plant (STP) short-term (instant)  
PNEC 2,22 mg/kg aquatic organisms freshwater sediment short-term (instant)  
PNEC 0,222 mg/kg aquatic organisms marine sediment short-term (instant)  
PNEC 0,327 mg/kg terrestrial organisms soil short-term (instant)*

#### ***Limonene***

*PNEC 14 µg/l aquatic organisms freshwater short-term (instant)  
PNEC 1,4 µg/l aquatic organisms marine water short-term (instant)  
PNEC 1,8 mg/l aquatic organisms sewage treatment plant (STP) short-term (instant)  
PNEC 3,85 mg/kg aquatic organisms freshwater sediment short-term (instant)  
PNEC 0,385 mg/kg aquatic organisms marine sediment short-term (instant)  
PNEC 0,763 mg/kg terrestrial organisms soil short-term (instant)*

#### ***beta-Pinene***

*PNEC 1,004 µg/l aquatic organisms freshwater short-term (single instance)  
PNEC 0,1 µg/l aquatic organisms marine water short-term (single instance)  
PNEC 3,26 mg/l aquatic organisms sewage treatment plant (STP) short-term (single instance)  
PNEC 0,337 mg/kg aquatic organisms freshwater sediment short-term (single instance)  
PNEC 0,034 mg/kg aquatic organisms marine sediment short-term (single instance)  
PNEC 0,067 mg/kg terrestrial organisms soil short-term (single instance)*

#### ***Menthol***

*PNEC 15,6 µg/l aquatic organisms freshwater short-term (instant)  
PNEC 1,56 µg/l aquatic organisms marine water short-term (instant)  
PNEC 2,37 mg/l aquatic organisms sewage treatment plant (STP) short-term (instant)  
PNEC 289 µg/kg aquatic organisms freshwater sediment short-term (instant)  
PNEC 28,9 µg/kg aquatic organisms marine sediment short-term (instant)  
PNEC 48,4 µg/kg terrestrial organisms soil short-term (instant)*

#### ***Citral***

*PNEC 0,007 mg/l aquatic organisms freshwater short-term (instant)  
PNEC 0,001 mg/l aquatic organisms marine water short-term (instant)  
PNEC 1,6 mg/l aquatic organisms sewage treatment plant (STP) short-term (instant)  
PNEC 0,125 mg/kg aquatic organisms freshwater sediment short-term (instant)  
PNEC 0,013 mg/kg aquatic organisms marine sediment short-term (instant)  
PNEC 0,021 mg/kg terrestrial organisms soil short-term (instant)*



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**(±)-β-Citronellol 106-22-9**

(±)-β-Citronellol 106-22-9 PNEC 0.002 mg/l aquatic organisms freshwater short-term (single instance)

(±)-β-Citronellol 106-22-9 PNEC 0 mg/l aquatic organisms marine water short-term (single instance)

(±)-β-Citronellol 106-22-9 PNEC 580 mg/l aquatic organisms sewage treatment plant (STP) short-term (single instance)

(±)-β-Citronellol 106-22-9 PNEC 0.026 mg/kg aquatic organisms freshwater sediment short-term (single instance)

(±)-β-Citronellol 106-22-9 PNEC 0.003 mg/kg aquatic organisms marine sediment short-term (single instance)

(±)-β-Citronellol 106-22-9 PNEC 0.004 mg/kg terrestrial organisms soil short-term (single instance)

**Geranyl acetate 105-87-3**

Geranyl acetate 105-87-3 PNEC 3.72 µg/l aquatic organisms freshwater short-term (single instance)

Geranyl acetate 105-87-3 PNEC 0.372 µg/l aquatic organisms marine water short-term (single instance)

Geranyl acetate 105-87-3 PNEC 8 mg/l aquatic organisms sewage treatment plant (STP) short-term (single instance)

Geranyl acetate 105-87-3 PNEC 0.442 mg/kg aquatic organisms freshwater sediment short-term (single instance)

Geranyl acetate 105-87-3 PNEC 0.044 mg/kg aquatic organisms marine sediment short-term (single instance)

Geranyl acetate 105-87-3 PNEC 0.086 mg/kg terrestrial organisms soil short-term (single instance)

**Eugenol, Nat - Cas: 97-53-0**

Objective: Freshwater - Value: 1,13 03

Objective: Marine water - Value: 0.113 03

Objective: Freshwater sediment - Value: 0,081 Mg / Kg

Objective: Marine sediment - Value: 0,081 Mg / Kg

Objective: Soil (Agricultural) - Value: 0,0155 Mg / Kg

Objective: Emissione Saltuaria - Value: 11.3 03

**Eugenol, Nat - Cas: 97-53-0**

Objective: Freshwater - Value: 1,13 03

Objective: Marine water - Value: 0.113 03

Objective: Freshwater sediment - Value: 0,081 Mg / Kg

Objective: Marine sediment - Value: 0,081 Mg / Kg

Objective: Soil (Agricultural) - Value: 0,0155 Mg / Kg

Objective: Emissione Saltuaria - Value: 11.3 03

**α-Terpineol**

PNEC 68 µg/l aquatic organisms freshwater short-term (single instance)

PNEC 6,8 µg/l aquatic organisms marine water short-term (single instance)

PNEC 2,6 mg/l aquatic organisms sewage treatment plant (STP) short-term (single instance)

PNEC 1,85 mg/kg aquatic organisms freshwater sediment short-term (single instance)

PNEC 0,185 mg/kg aquatic organisms marine sediment short-term (single instance)

PNEC 0,329 mg/kg terrestrial organisms soil short-term (single instance)



## 8.2. Exposition controls

### 8.2.1. Appropriate engineering control

Measures related to the substance/mixture to prevent exposure during identified uses

:

The description of the appropriate exposure control measures refer to the specified in subsection 1.2 identified uses of the substance or the mixture. Usually general or local exhaust ventilation is required to observe the limit(s) of exposure.



### 8.2.2. Personal protective equipment:

Use personal protective equipment, clean and correctly maintained. Keep the personal protective equipment in a clean place far from the operating area. Never eat, drink or smoke while handling the product. Remove and wash the contaminated clothing before re-use.

#### 8.2.2.1. Eyes and face protection:

Avoid eye contact. Use eye protectors (goggles complying to EN 166), intended to protect eyes from liquid splashes.

#### 8.2.2.2. Skin protection

##### Hand protection :

Wear appropriate protective gloves (chemical resistant according EN 374 standard) in case of prolonged or repeated skin contact. Recommended type of gloves: nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR) or PVA (polyvinyl alcohol).

##### Body protection :

The protective clothing should be regularly washed. After a contact with the product all the contaminated parts of the body should be washed.

#### 8.2.2.3. Respiratory tract protection :

In case the ventilation is not sufficient respiratory tract protection equipment should be used. When vapors / aerosols type A2 are generated.

#### 8.2.2.4. Thermal hazards :

No data available.

#### 8.2.2.5. Additional protection :

In case of spillage protective boots against slipping may be used.



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Training measures related to the avoiding of exposition : The training of the staff is organized according a company schedule.

Organization measures to avoid exposition : Training of staff

Technical measures to avoid exposition : Training of staff

### **Environmental exposure controls**

Basic guidelines : Do not wash-off in surface waters and sewer systems.

## **9. Physical and Chemical Properties**

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

State of aggregation : liquid

Appearance : mobile colorless to pale amber to green-yellow – colored liquid.

Color : pale amber-yellow to green-yellow

Odor : Pleasant, fresh, strong, rose-like with different notes depending on the origin.

Odor Threshold : No information available at the moment.

Melting point/freezing point : No information available.

Boiling point or initial boiling point and duration of boiling : No information available.

Flammability : No information available.

Explosivity : No information available.

Lower and upper limit of explosivity : No information available.

Flash temperature : 85°C

Boiling point : No information available.

Self-ignition temperature : No information available.



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Decomposition temperature : No information available.

pH : No information available.

Solubility : Soluble in 1:3 v / v Ethanol 70%. Soluble in all kinds of ratios in benzyl benzoate and vegetable oils. Its solutions in mineral oils and propylene glycol opalize.

Insoluble : water, glycerin.

Partition coefficient n-octanol/water (logarithmic value) : No information available.

Vapor pressure : No information available.

Density and/or relative density : No information available.

Vapor relative density : No information available.

Characteristics of particles : Not applicable.

## 9.2. Other information

Refractive index at  $n^{20}/d$  : 1.458 to 1.468

Relative density at  $d^{20}$  : 0.878 to 0.892

No other information is available.

### 9.2.1. Information on the classes of physical hazards

Note : No information available.

## 10. Stability and Reactivity

### 10.1. Reactivity

Note : The product is considered stable at the recommended conditions of storage.

### 10.2. Chemical stability

Note : Unstable with strong acid, and in alkali environment its esters saponify.

### 10.3. Possible hazardous reactions

Hazardous reactions : Fire hazard.



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#### 10.4. Conditions to avoid

Conditions to avoid : Keep away from ignition sources – do not smoke.  
Do not store near heat, sparks, naked flames, strong acids.

Thermal decomposition : No data available.

#### 10.5. Incompatible materials

Materials to avoid : Strong acids, strong alkali, strong oxidizers, strong reducing agents.

#### 10.6. Hazardous decomposition products

Hazardous decomposition Products : In case of fire hazardous decomposition products may be generated such as carbon oxide and dioxide and nitrogen evaporation and oxides.

### 11. Toxicological Information

#### 11.1. Information on toxicological effects

##### Acute toxicity

*EUGENYL METHYL ETHER (METHYL EUGENOL) (CAS: 93-15-2)*

*Oral: LD50 = 810 mg/kg*

*dermal LD50 >2.025 mg/kg rabbit TOXNET*

*Menthol*

*oral LD50 3.300 mg/kg rat TOXNET*

*dermal LD50 >5.000 mg/kg rabbit TOXNET*

*inhalation (dust/mist)LC50 5.289 mg/m<sup>3</sup>/4h rat ECHA*

*Citral*

*oral LD50 6.800 mg/kg rat ECHA*

*dermal LD50 >2.000 mg/kg rat ECHA*

*CITRONELLOL (CAS: 106-22-9)*

*Oral: LD50 = 3450 mg/kg*

*Dermal: LD50 = 2650 mg/kg*

*Linalool 78-70-6 dermal LD50 2.200 mg/kg mouse*

*Linalool 78-70-6 oral LD50 2.790 mg/kg rat*

*Linalool 78-70-6 dermal LD50 5.610 mg/kg rabbit*

*GERANYL ACETATE 105-87-3*

*Oral LD50 (rat): 6330 mg/kg; Oral LD50 (mouse): 8 gm/kg*



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**D-LIMONENE(CAS:5989-27-5)**

**ORAL ROUTE:** LD50= 4,400 - 5,10MG/KG

**SPECIES :** Rat

**EUGENOL (CAS: 97-53-0)**

*Oral: LD50 = 2300 mg/kg*

***beta-Myrcene***

*LD50 Oral - Rat - male - > 3.380 mg/kg*

*Notes: (ECHA)*

*Inhalation: No information available*

*LD50 Dermal - Rabbit- > 5.000 mg/kg*

*(OECD Test Guideline 402)*

***GERANIOL (CAS: 106-24-1)***

*Oral: LD50 = 4200 mg/kg*

***para-Cymene***

*LD50 Oral - Rat – male and female - 4.750 mg/kg*

*Assessment of acute toxicity Inhalation - 4 h - 3 mg/l - vapor*

*(Assessment of acute toxicity)*

*Notes: (REGULATION (EC) № 1272/2008, Annex VI)*

*Assessment of acute toxicity Inhalation - 3 mg/l – vapor*

*(The assessment of acute toxicity according to Regulation (EU) No. 1272/2008)*

*LD50 Dermal - Rabbit - > 5.000 mg/kg, Notes: (ECHA)*

***Terpineol***

*oral LD50 4.300 mg/kg rat ECHA*

*dermal LD50 >2.000 mg/kg rat ECHA*

***Beta-Caryophyllene***

*oral LD50 >5.000 mg/kg mouse ECHA*

***Farnesol***

*LD50 Oral - Rat - 6.000 mg/kg*

*Notes: Behavioral: somnolence (generally suppressed activity).*

*Behavioral: Antipsychotic.*

*Inhalation: No information available*

*LD50 Dermal - Rat - male and female - > 15.000 mg/kg*

*Notes: (ECHA)*

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---

### Corrosion/Skin irritation

---

**Menthol**

*Causes skin irritation.*



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**Citral**

*Causes skin irritation.*

***Linalool(Cas:78-70-6)***

*Dermal Route:Ld50=5610mg/Kg*

*Species: Rabbit, Oecd guideline 402(Acute Dermal Toxicity)*

***Linalool(Cas:78-70-6)***

*Irritation:Average Score =1.85*

*Effect Observed : Erythema Score*

*Species : Rabbit*

*Duration Of Exposure : 24h oecd guideline 404(Acute Dermal Irritation /Corrosion)*

***Citronellol***

*Skin – Rabbit*

*Result: irritating - 4 h*

*(OECD Test Guideline 404)*

***GERANIOL (CAS: 106-24-1)***

*LD50 (Rabbit) = > 5,000 mg/kg*

***D-LIMONENE (cas:5989-27-5)***

*oral route: ld50= > 5000mg/kg*

*species : rabbit*

***D-LIMONENE (cas:5989-27-5)***

*oral route: ld50= > 5,600 - 6000mg/kg*

*species : mouse*

**EUGENOL 97-53-0**

*LD50 Oral-Rat-male-> 2.000 mg/kg (OECD Test Guideline 423) LD50*

*Inhalation-Rat-male-4 h-> 2,6 mg/l (OECD Test Guideline 403)*

***GERANYL ACETATE 105-87-3***

*Oral LD50 (rat): 6330 mg/kg; Oral LD50 (mouse): 8 gm/kg*

***Beta-Caryophyllene***

*oral LD50 >5.000 mg/kg mouse ECHA*

***beta-Myrcene***

*Skin - in vitro eye irritation test*

*Result: Irritating to skin.*

*(EPISKIN Human Skin Test Model)*

***Terpineol***

*Causes skin irritation.*



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*Farnesol*

*Skin - Rabbit*

*Result: Irritating to skin.*

*(OECD Test Guideline 404)*

Notes : Causes skin irritation.

---

#### **Serious eye damage/ irritation**

---

*Citronellol*

*Eye - Rabbit*

*Result: Eye irritation (OECD Test Guideline 405)*

*Eugenol*

*Causes serious eye irritation.*

*beta-Myrcene*

*Eye – Rabbit*

*Result: Eye irritation.*

*(OECD Test Guideline 405)*

*Geraniol*

*Causes serious eye damage.*

*Methyl eugenol*

*Causes serious eye irritation.*

*Eugenol 97-53-0*

*Eye – Rabbit Result: Eye irritation. (OECD Test Guideline 405)*

*Menthol*

*Causes serious eye irritation.*

*Терпинеол*

*Causes serious eye irritation.*

Result

: Causes serious eye damage.

May cause irreversible damage of eyes such as eye tissue damage or serious physical decay of vision that is not fully invertible in a period of 21 days. The serious damage of eyes is characterized with the destruction of cornea, and the permanent opacity of cornea and iritis.

---

#### **Respiratory or skin sensitization**

---

*Eugenol 97-53-0*

*Local lymph node assay (LLNA)-Mouse Result: positive (OECD Test Guideline 429)*



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*Citronellol*

*Local lymph node assay (LLNA) - Mouse*

*Result: positive (OECD Test Guideline 429)*

*Beta-Caryophyllene*

*Local lymph node assay (LLNA) - Guinea pig Result: positive (OECD Test Guideline 429)*

*May cause serious allergic skin reaction.*

*Farnesol*

*Local lymph node assay (LLNA) – Mouse*

*Result: Causes allergy.*

*(OECD Test Guideline 429)*

Note: May cause serious allergic skin reaction.

---

**Ingestion**

---

Note : No data available.

---

**Mutagenicity of germ cells**

---

*methyleugenol*

*It is supposed that it causes genetic defects.*

*Test type: In vitro chromosomal aberration test*

*Result: positive*

*Rat (eugenol), Liver, DNA damage*

*Mouse (eugenol), lymphocytes*

*Mutation of the mammalian somatic cells.*

*Guinea pig (eugenol) germ*

*DNA synthesis*

*Guinea pig (eugenol) germ*

*Morphological transformations.*

*Guinea pig (eugenol) germ*

Note : It is supposed that it causes genetic defects

---

**Carcinogenicity**

---

Note : CAS 5989-27-5; IARC Group 3; The agent cannot be classified as carcinogenic for human

IARC: 3 Group 3 : Cannot be classified as carcinogenic for human  
(Eugenol)



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### **Summary of the assessment of CMR properties**

---

*Methyl Eugenol*  
Result – positive

Note : It is supposed to cause cancer.

*para-Cymene*

*It is supposed to impair fertility.*

*Toxicity to the developing organism - Rat - male and female - Oral*

---

### **STOT (specific Objective organ toxicity) — single exposure**

---

Note : No data available

---

### **STOT (specific Objective organ toxicity) — repeated exposure**

---

Note : No data available

---

### **Aspiration hazard**

---

*Beta-Caryophyllene*

*It can be fatal if swallowed and enters the respiratory tract.*

---

### **Information on possible routes of exposure**

---

Note : Dermal.

---

### **Symptoms related to physical, chemical and toxicological characteristics**

---

Note : Toxicological characteristics are not comprehensively studied

---

### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

---

Note : Toxicological characteristics are not comprehensively studied

---

### **Interactions**

---

Note : Toxicological characteristics are not comprehensively studied



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#### **Lack of specific data**

---

Note : Toxicological characteristics are not comprehensively studied

---

---

#### **Mixtures**

---

Note : Toxicological characteristics are not comprehensively studied

---

---

#### **Medical consideration**

---

Note : The individuals having rash are directed to a dermal specialist to be examined for allergic eczema.

---

---

#### **Other information**

---

Note : Please, remember that this oil contains methyl eugenol that is considered potentially carcinogenic by IFRA (based on high-dose study on rodents). It must be mentioned though that there is not evidence that the tumour in humans are cause by the use of the essencial oils.  
Dilute before use. Before use a patch test should be carried out for people with sensitive skin.

### **11.2. Properties disturbing the functions of the endocrine system**

*para-Cymene*

*Repeated dose toxicity - Rat - male - Oral - No adverse effect level has been studied  
- 50 mg/kg*

*Repeated dose toxicity - Rat - male - Inhalation*

*Notes: (ECHA)*

### **12. Ecological information**

Note : No information is available on the oil itself.

---

#### **12.1. Toxicity of components**

---

**Product:**

---

**Acute (short-term) toxicity:**

---

**Fish**

---

*Menthol*

*LC50 15,6 mg/l fish ECHA 96 h*



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*Citral*

*LC50 6,78 mg/l fish ECHA 96 h*

*Citronellol*

*static test LC50 - Leuciscus idus - 14,66 mg/l - 96 h Notes: (ECHA)*

*Eugenol*

*LC50 13 mg/l fish ECHA 96 h*

*Geraniol*

*LC50 22 mg/l fish ECHA 96 h*

*LC50(96 h, Danio rerio (zebra fish)) = 14 mg/l*

*Farnesol*

*LC50 - Pimephales promelas (A small fish, stickleback) - 1,43 mg/l- 96 h Notes: (ECHA)*

*Linalool*

*LC50 27,8 mg/l fish ECHA 96 h*

*Methyleugenol*

*LC50-Oncorhynchus mykiss (Canadian trout)-6 mg/l-96 h*

*LC50-Oncorhynchus mykiss (Canadian trout)-6 mg/l-96 h*

*LC50-Lepomis macrochirus (Bluegill Sunfish)-8,1 mg/l-96 h*

*LC50-Oncorhynchus mykiss (Canadian trout)-6,9 mg/l-96 h*

*para-Cymene*

*static test LC50 - Cyprinodon variegatus (Sheepshead sea bream) - 48 mg/l - 96 h  
(OPPTS 850.1075)*

*Terpineol*

*LC50 70 mg/l fish ECHA 96 h*

---

### Toxic for Daphnia and other aquatic invertebrates

---

*Menthol*

*EC50 26,6 mg/l aquatic invertebrates ECHA 48 h*

*Citral*

*EC50 6,8 mg/l aquatic invertebrates ECHA 48 h*

*Citronellol*

*static test EC50 - Daphnia magna (Daphnia) - 17,48 mg/l - 48 h Notes: (ECHA)*

*Eugenol*

*EC50 1,05 mg/l aquatic invertebrates ECHA 48 h*

*EC50-Daphnia (waterflea)-1.13mg/l-48h (Eugenol).*



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*Farnesol*

*semi-static test EC50 - Daphnia magna (Daphnia) - 0,568 mg/l -48 h (OECD Test Guideline 202)*

*semi-static test NOEC - Daphnia magna (Daphnia) - 0,532 mg/l -48 h (OECD Test Guideline 202)*

*Geraniol*

*EC50 10,8 mg/l aquatic invertebrates ECHA 48 h*

*EC50(48 h, Daphnia magna (Water flea)) = 7.75 mg/l (OECD Test Guideline 202)*

*Linalool*

*EC50 59 mg/l aquatic invertebrates ECHA 48 h*

*Beta-Caryophyllene*

*static test EC50 - Daphnia magna Straus (Water flea) - > 0,17 mg/l - 48 h (OECD Test Guideline 202)*

*EC50 >0,17 mg/l giant water flea ECHA 48 h*

*beta-Myrcene*

*EC50 - Daphnia magna (Daphnia) - 1,47 mg/l - 48 h*

*(OECD Test Guideline 202)*

*para-Cymene*

*semi-static test EC50 - Daphnia magna (Daphnia) - 3,7 mg/l - 48h (OECD Test Guideline 202)*

*Terpineol*

*EC50 73 mg/l aquatic invertebrates ECHA 48 h*

---

**Algae/aquatic plants**

---

*Menthol*

*ErC50 21,4 mg/l algae ECHA 72 h*

*Citral*

*ErC50 103,8 mg/l algae ECHA 72 h*

*Citronellol*

*static test ErC50 - Scenedesmus quadricauda (green algae) - 2,4 mg/l - 72 h*

*Notes: (ECHA)*

*Eugenol*

*ErC50 24 mg/l algae ECHA 72 h*

*Farnesol*

*static test EC50 - Pseudokirchneriella subcapitata (green algae) - 1,49 mg/l - 72 h (OECD Test Guideline 201)*

*static test NOEC - Pseudokirchneriella subcapitata (green algae) - 0,083 mg/l - 72 h (OECD Test Guideline 201)*



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*Geraniol*

*ErC50 13,1 mg/l algae ECHA 72 h*

*ErC50(72 h, Scenedesmus capricornutum (fresh water algae)) = 3.32 mg/l (OECD Test Guideline 201)*

*Linalool*

*ErC50 156,7 mg/l algae ECHA 96 h*

*Beta-Caryophyllene*

*ErC50 >0,033 mg/l algae ECHA 72 h*

*beta-Myrcene*

*ErC50 - Pseudokirchneriella subcapitata (green algae) - 0,32mg/l - 72 h (OECD Test Guideline 201)*

*para-Cymene*

*static test EC50 - Scenedesmus capricornutum (freshwater algae) - 4,03 mg/l - 72 h (OECD Test Guideline 201)*

*Terpineol*

*ErC50 68 mg/l algae ECHA 72 h*

---

### Bacteria

---

*Citronellol*

*Difficulty breathing EC50 - Pseudomonas putida*

*(A rod-shaped gram-negative bacterium) - > 10.000 mg/l - 0,5h Notes: (ECHA)*

*Farnesol*

*Static test EC50 - Activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)*

*Linalool*

*EC50 >100 mg/l microorganisms ECHA 30 min*

*beta-Pinene*

*EC50 326 mg/l microorganisms ECHA 3 h*

*static test EC50 - Sewage sludge - 326 mg/l - 3 h (OECD Test Guideline 209)*

*para-Cymene – toxic for bacteria*

*static test NOEC - Activated sludge - 100 mg/l - 28 d*

---

### Chronic (long-term) toxicity:

---

Note

:

No data available.



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## Fish

---

Note : No data available

---

## Shellfish

---

*Limonene*  
EC50 188 µg/l aquatic invertebrates ECHA 21 d

---

## Algae/water plants

---

Note : No data available

---

## Other organisms

---

*Citral*  
EC50 160 mg/l microorganisms ECHA 30 min  
*Geraniol*  
EC50 70 mg/l microorganisms ECHA 30 min

*Linalool* 78-70-6  
EC50 >100 mg/l microorganisms 30 min

---

## 12.2. Persistence and degradability

---

### Product:

---

#### Abiotic degradation

---

---

#### Degradation of mixture components

---

*DL- $\alpha$ -pinene* 80-56-8  
oxygen depletion 68 % - 28 d

*Mugsepe* 123-35-3  
oxygen depletion 76 % - 28 d

*Linalool* Abiotic degradation Time  
oxygen depletion 40,9 % - 5 d

*Geraniol* 106-24-1  
DOC deprivation 90 – 100 % 3 d ECHA

*Farnesol* aerobic - Exposure time 28 d  
Result: 70 % - Easily biodegradable. (OECD Test Guideline 301F)

*Geranyl Acetate* 105-87-3  
oxygen depletion >70 % 28 d ECHA



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---

### **Physical and photo-chemical elimination**

---

Note : No data available

---

### **Biochemical degradation**

---

Note : Biodegradation expected.

---

#### **12.3. Bioaccumulation**

---

**Product:** No data available

#### **Bioaccumulation of mixture components**

*DL-a-pinene Log KOW4,83*

*DL-limonene Log KOW 4,57*

*Mugsepe Log KOW4,82 (pH value:~6,5, 30°C)*

*Menthol Log KOW 3,15 (25°C) (ECHA)*

*Citral log KOW 2,76 (25°C) (ECHA)*

*Geraniol log KOW 2,6 (25°C) (ECHA)*

*Linalool log KOW 2,9 (pH value: 7, 20°C) (ECHA)*

*Beta-Caryophyllene log KOW 6,23 (pH value: 7, 25°C) (ECHA)*

*Terpineol n-octanol/water (log KOW) 2,98 (TOXNET)*

---

### **Bioconcentration factor (BCF)**

---

Notes : Does not accumulate in biological environment

---

#### **12.4. Mobility in soil**

---

**Product:**

---

#### **Known or predicted distribution in environmental components**

---

Note : No data available

---

#### **Surface tension**

---

Note : No data available

---

#### **Adsorption/desorption**

---

Note : No data available

---

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

This product doesn't contain substances considered persistent, bioaccumulative or toxic PBT.

**Product:**

---

#### **Results from PBT and vPvB assessment**

---

Note : No data available



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## 12.6. Other adverse effects

**Product:**

### **Biochemical oxygen demand (BOD)**

Value : No information available

### **Chemical oxygen demand (COD)**

Value : No information available

### **Additional ecological information/Mobility in soil**

Notes : No information available

## 12.7. Additional information

Notes : Avoid penetration of products in streams, sewer systems or other water routes.

## 13. Disposal Considerations

### 13.1. Waste treatment methods

#### 13.1.1. Disposal of product/packing

**Codes/designation of waste according to LoW: -**

Product : Dispose of in accordance with all local and national regulations.

Contaminated packaging material : Dispose of as unused product. Do not contaminate soil, water or environment with waste containers. Waste products should be treated according to the applicable local, national and European legislation.

European Catalogue waste number : No waste code can be given to this product according to the European Waste Catalogue since it is related to its potential use. Waste code is given after consulting the regional waste Service

**13.1.2. Information on waste treatment** : Contact an authorized professional service to dispose of this material.

**13.1.3. Information on discharge in sewer systems** : Prevent discharge in streams, canals or other water routes.



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## 14. Information on transportation

Not regulated.

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

Not applicable.

### 14.4. UN proper shipping name

Not applicable.

### 14.5. Environmental hazard



The material is dangerous for environment.

### 14.6. Social precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II to MARPOL and IBC Code“

#### Road transport

ADR

The product is not related to the transport regulations.

RID

The product is not related to the transport regulations.

#### Waterway transport

AND

The product is not related to the transport regulations.

#### Maritime transport

IMDG

The product is not related to the transport regulations.



### Air transport

IATA/CAO

The product is not related to the transport regulations.

## 15. Regulatory information

### 15.1. Legislation specific for the substance or mixture / safety, health and environmental regulations

Other regulations /  
Laws

: This safety data sheet is consistent with the  
Law on Protection from Harmful Effects of  
Substances and Preparations and the Ordinance on the  
Classification, Packaging and Labelling

EU legislative acts

: accordingly, EU regulations.

The following restrictions are applicable as per Annex XVII to Regulation (EC) No. 1907/2006 of REACH

3. Liquid substances or mixtures which are regarded as dangerous set out in Annex I to Regulation (EC) No 1272/2008	Pelargonium Roseum Leaf Oil, A-Pinene, Beta-Pinene, Alpha-Phellandrene, Beta - Myrcene, P-Cymene, G-Terpinene (Gamma-Terpinene), Limonene, Methyl Eugenol, Linalool, Citronellol, Geraniol, Eugenol, A-Humulene, Geranyl Acetate, Menthol, Terpineol, Citral, Beta-Caryophyllene, Farnesol
3a. Substances or mixtures meeting the criteria for any of the following hazard classes or categories listed in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8, type A and B, 2.9 , 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15	A-Pinene, Beta-Pinene, Alpha-Phellandrene, Beta - Myrcene, P-Cymene, G-Terpinene (Gamma-Terpinene), Limonene, Linalool
3.b. Substances or mixtures meeting the criteria for any of the following hazard classes or categories listed in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development , 3.8 effects other than narcotic effects, 3.9 and 3.10	Pelargonium Roseum Leaf Oil, A-Pinene, Beta-Pinene, Alpha-Phellandrene, Beta - Myrcene, P-Cymene, G-Terpinene (Gamma-Terpinene), Limonene, Methyl Eugenol, Linalool, Citronellol, Geraniol, Eugenol, A-Humulene, Geranyl Acetate, Menthol, Terpineol, Citral, Beta-Caryophyllene, Farnesol
3.c. Substances or mixtures meeting the criteria for any of the following hazard classes or categories listed in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Pelargonium Roseum Leaf Oil, A-Pinene, Beta-Pinene, G-Terpinene (Gamma-Terpinene), Limonene, Methyl Eugenol, Linalool, Citronellol, Geranyl Acetate, Farnesol

Permits or  
restrictions for use

: According to Regulation 1223/2009.

\* The component methyl eugenol is not permitted for use in cosmetics products excluding the cases it is a natural ingredient of the essential oils or other natural flavoring product. In the end product it should not exceed the following quantities:

- 0.01% in fine perfumes;
- 0.004% in toilet water;
- 0.002% cream perfumes;
- 0.0002% - other leave-on products and oral products;



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- 0.001% rinse-off products

\* The maximum level for the dermal application of this oil is 0.016% - for leave-on cosmetics product and 0.08% for rinse-off product, it depends on the methyl eugenol content in the oil.

## 15.2. Chemical Safety Assessment

No information available.

The supplier had not prepared a chemical safety assessment for this substance/mixture.

## 16. Other information

Shelf life 30 months from the date of production.

**Classification and procedure used to obtain the classification of mixtures according to Regulation (EC) No 1272/2008 [CLP]**

**Specifying the changes :**

**Change of allergens and additional information about the product based on gas-chromatographic analysis and latest changes.**

**Abbreviations and acronyms:**

<b>Abbr.</b>	<b>Description of used abbreviations</b>
<b>ADN</b>	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement on the International Carriage of Dangerous Goods by Inland Waterways)
<b>ADR</b>	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement on the International Carriage of Dangerous Goods by Road)
<b>Aquatic Chronic 3</b>	Hazardous for aquatic environment – chronic toxicity
<b>BCF</b>	Bioconcentration factor
<b>BOD</b>	Biochemical Oxygen Demand
<b>CAS</b>	Chemical Abstracts Service (provides the most comprehensive list of chemicals)
<b>Carc.2</b>	It supposed to cause cancer.
<b>CLP</b>	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (Classification, Labelling and Packaging)
<b>CMR</b>	Carcinogenic, mutagenic and toxic for reproduction (substance)
<b>COD</b>	Chemical Oxygen Demand
<b>DGR</b>	Dangerous Goods Regulations (see IATA/DGR)
<b>DMEL</b>	Derived Minimal Effect Level
<b>DNEL</b>	Derived No-Effect Level
<b>EINECS</b>	European Inventory of Existing Commercial Chemical Substances
<b>ELINCS</b>	European List of Existing Commercial Chemical Substances



<b>EmS</b>	Emergency Schedule
<b>Eye Dam.</b>	Eye damage
<b>GHS</b>	Globally Harmonized System of Classification and Labeling of Chemicals
<b>IATA</b>	International Air Transport Association
<b>IAT/DGR</b>	Dangerous Goods Regulations (DGR) for the air transport (IATA)
<b>ICAO</b>	International Civil Aviation Organization
<b>IMDG</b>	International Maritime Dangerous Goods Code
<b>Log KOW</b>	n-octanol/water
<b>MARPOL</b>	International Convention on Prevention of Pollution from Ships (abbr. to "Marine Pollutant")
<b>Muta.2</b>	It is assumed to cause genetic defects
<b>NLP</b>	No-longer polymer
<b>PBT</b>	Persistent, bioaccumulative and toxic
<b>PNEC</b>	Predicted No-Effect Concentration
<b>REACH</b>	Registration, Evaluation, Authorisation and Restriction of Chemicals
<b>RID</b>	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulation on Carriage of Dangerous Goods by Rail)
<b>Corrosion/Irritation 2</b>	Skin irritation
<b>Skin Sens.</b>	Skin Sensitization
<b>vPvB</b>	very Persistent and very Bioaccumulative
<b>EU No in EC-List</b>	(EINECS, ELINCS and NLP – list) is the source of the seven digit number, identifying the substances at the commercial network of the European Union
<b>Index No</b>	The index number is the identification code of the substance in part 3 of Annex VI of Regulation (EC) 1272/2008
<b>VOC</b>	Volatile Organic Compounds

**Main references and sources of data in the literature**

- Regulation (EC) No 1907/2006 (REACH), as amended by 2020/878/EU
- Regulation (EC) No 1272/2008 (CLP, EC GHS)

	<b>List of relevant phrases (code and full text as defined in Section 2 and 3)</b>
<b>Code</b>	<b>Text</b>
H315	Causes skin irritation
H317	May cause allergic skin reaction
H318	Causes serious eye irritation
H341	It is assumed to cause genetic defects.
H351	It is assumed to cause cancer
H412	Toxic for aquatic life with long-lasting effect
EUH208	Contains beta-Myrcene, para-Cymene, Limonene, Linalool, Citronellol, Geraniol, Eugenol, Methyl Eugenol, Alpha-Pinene, Beta-Phellandrene, Amyl Cinnamyl Alcohol. May cause allergic reaction.
<b>List of instructions for safe treatment, used in the safety document</b>	
P101	In case you need medical advice have with you the packing or the label of the



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	product.
P102	Keep away from children
P264	Wash hands thoroughly after handling.
P280	Use protective gloves/protective clothing/goggles/protective face mask
P302 + P352	IF SKIN CONTACT: wash with plenty of water...
P305 + P351 +	If contact with eyes: Rinse thoroughly with water for several minutes. Remove the contact lenses if there are such and if possible. Continue rinsing.
P338	
P310	Immediately call TOXICOLOGY CENTER / physician...
P333 + P313	If skin irritation or rash: seek medical advice/help.
P273	Avoid release in environment
P405	Keep under lock and key.
P501	Dispose of the content / container in an approved for disposal place in compliance with the local and national regulations.

<b>Other information</b>	<b>:</b>	<p>In accordance with general product specification: The information in this material safety data sheet is meant to represent typical data/analysis for this product and was obtained from current and reliable sources. To the best of our knowledge, data is accurate and based on our knowledge and information, at the time of publication. The information presented is intended only as a guidance for proper and safe use, handling, storage, transportation and disposal, and should not be considered a guarantee /expressed or implied / or a quality specification with respect to the correctness or accuracy. It is responsibility of the user to determine any safe conditions for use of this product, and to assume responsibility for any loss, injury, damage or expenses resulting from the improper use of this product. The information relates to the specific product only and is not valid when used in combination with other materials or in any process, unless specified in the text. The information provided does not constitute a delivery contract; regarding any specification or a given application, the buyer must determine for himself the requirements and recommendations for use of the product.</p>
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<b>Disclaimer</b>	<b>:</b>	<p>The data in this Safety Data Sheet correspond to the fair presentation of our experience at the time of printing. The information should give you basic guidelines for safe handling of this product, specified in the Safety Data Sheet, regarding its storage, processing, transport and disposal. Data cannot be assigned to other products.</p>
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If the product is mixed or processed with other materials, or if it is subject to processing, the data in this Safety Data Sheet cannot be assigned to the new material unless expressly stated otherwise.

The information presented is intended only as a guidance for proper and safe use, handling, processing, storage, transportation and disposal, and should not be considered a guarantee or a quality specification.

Due to the many factors out of our control we cannot assume responsibility for any incidents, accidents, loss or damage resulting from the use of this product

**The information provided is intended only as a guide to safe handling, use, processing, storage, transportation, disposal and release and should not be considered a warranty or quality specification.**

**Due to the many factors beyond our control in the use of this product, we cannot accept responsibility for accidents, mishaps, loss or damage caused by its use.**

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**LIST OF 26 ALLERGEN SUBSTANCES / ANNEX III TO REGULATION (EC) NO 1223/2009**

**Customer: „ ALTEYA ORGANICS LLC, 1 Rose Field St., 6167, Village of Yagoda, Stara Zagora**

**Name of product: Organic Rose Geranium Oil (Pelargonium Roseum Leaf Oil - Organic) –**

**v.02/18.10.2023**

	NAME OF SUBSTANCES	REMARK	CAS №	EINECS №	NATURAL %	SYNTHETIC %	TOTAL %
1	AMYL CINNAMAL	H317; H411	122-40-7	204-541-5	-	-	-
2	AMYLCINNAMYL ALCOHOL	H315; H317	101-85-9	202-982-8	-	-	-
3	ANISE ALCOHOL	H302; H318 H317	105-13-5	203-273-6	-	-	-
4	BENZYL ALCOHOL	H332; H302	100-51-6	202-859-9	-	-	-
5	BENZYL BENZOATE	H302	120-51-4	204-402-9	-	-	-
6	BENZYL CINNAMATE	H317; H411	103-41-3	203-109-3	-	-	-
7	BENZYL SALICYLATE	H317; H411	118-58-1	204-262-9	-	-	-
8	CINNAMAL	H312; H315 H317	104-55-2	203-213-9	-	-	-
9	CINNAMYL ALCOHOL	H317	104-54-1	203-212-3	-	-	-
10	CITRAL	H315; H317	5392-40-5	226-394-6	0,8	-	0,8
11	CITRONELLOL	H315; H317 H411	106-22-9	203-375-0	31,7	-	31,7
12	COUMARIN	H302; H317	91-64-5	202-086-7	-	-	-
13	EUGENOL	H319; H317	97-53-0	202-589-1	0,5	-	0,5
14	FARNESOL	H315; H319	4602-84-0	225-004-1	0,2	-	0,2
15	ALPHA-ISOMETHYL IONONE	H412	127-51-5	204-846-3	-	-	-
16	GERANIOL	H315; H317	106-24-1	203-377-1	18,5	-	18,5
17	HEXYL CINNAMAL	H317;	101-86-0	202-983-3	-	-	-
18	HYDROXYCITRONELLAL	H319; H317	107-75-5	203-518-7	-	-	-
19	ISOEUGENOL	H312; H302 H319; H315 H317	97-54-1	202-590-7	-	-	-
20	BUTYLPHENYL METHYLPROPIONAL (LILIAL)	H317	80-54-6	201-289-8	-	-	-
21	LIMONENE	H226; H315 H317; H411	5989-27-5	227-813-5	0,6	-	0,6
22	LINALOOL	H315	78-70-6	201-134-4	6,2	-	6,2
23	HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE (LYRAL)	H317	31906-04-4	250-863-4	-	-	-
24	METHYL 2-OCTENOATE	H302; H317	111-12-6	203-836-6	-	-	-
25	EVERNIA FURFURACEA LICHEN EXTRACT (TREEMOSS EXTRACT)	H317	90028-67-4	289-860-8	-	-	-
26	EVERNIA PRUNASTRI (OAK MOSS)	H317	90028-68-5	289-861-3	-	-	-
27	ALPHA-PINENE	H226; H315; H317; H304 H400; H410	80-56-8	201-291-9	0,7	-	0,7
28	BETA PINENE	H226; H315; H317; H304 H400; H410	127-91-3	204-872-5	0,2	-	0,2
29	BETA-CARYOPHYLLENE	H317; H304	87-44-5	201-746-1	2,9	-	2,9
30	MENTHOL	H315; H317	89-78-1	201-939-0	0,3	-	0,3
31	TERPINEOL	H315; H319	8000-41-7	232-268-1	0,8	-	0,8
32	GERANYL ACETATE	H315; 317, H412	105-87-3	203-341-5	6,3	-	6,3

According to Regulation EO 1223/2009 is here by amended as follows:

The presence of the substance must be indicated in the list of ingredients referred to in Article 6(1)(g) when its concentration exceeds:— **0,001 %** in “leave-on” products, (and)— **0,01 %** in “rinse-off” products