

**Mandarin & Orange**



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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** Mandarin & Orange  
**Product code:** 4610101
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Essence  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
ECHOES MUM VE KOKU TASARIM PAZARLAMA VE SAN. A.Ş  
FERİKÖY FIRIN SOKAK NO: 69 KAT: 4 34360  
BOMONTI / ŞİŞLİ - İSTANBUL  
T + 90 212 231 41 54  
info@candlelab.com.tr - www.candlelab.com.tr
- 1.4 Emergency telephone number:** 114

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400  
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411  
Asp. Tox. 1: Aspiration hazard, Category 1, H304  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
Danger  
  
**Hazard statements:**  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1B: H317 - May cause an allergic skin reaction.  
**Precautionary statements:**  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
**Supplementary information:**  
Contains (-)-pin-2(3)-ene, (r)-p-mentha-1,8-diene, [1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one, Cineole, Citral, Citronellal, Citronellol, Ethyl 2,3-epoxy-3-phenylbutyrate, Geranyl acetate, Linalool, P-mentha-1,3-diene, P-mentha-1,4(8)-diene.
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

**Chemical description:** Mixture based on aromatising substances and preparations.

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 5989-27-5 EC: 227-813-5 Index: Non-applicable REACH:01-2119529223-47-XXXX	<b>(r)-p-mentha-1,8-diene<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	25 - <50 %
CAS: 77-83-8 EC: 201-061-8 Index: Non-applicable REACH:01-2119967770-28-XXXX	<b>Ethyl 2,3-epoxy-3-phenylbutyrate<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Chronic 2: H411; Skin Sens. 1B: H317 - Warning	5 - <25 %
CAS: 586-62-9 EC: 209-578-0 Index: Non-applicable REACH:01-2119982325-32-XXXX	<b>P-mentha-1,4(8)-diene<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Skin Sens. 1B: H317 - Danger	5 - <25 %
CAS: 79-77-6 EC: 201-224-3 Index: Non-applicable REACH:01-2119449921-34-XXXX	<b>(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Chronic 2: H411	1 - <5 %
CAS: 8050-15-5 EC: 232-476-2 Index: Non-applicable REACH:01-2119969275-26-XXXX	<b>Resin acids and Rosin acids, hydrogenated, Me esters<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Chronic 3: H412	1 - <5 %
CAS: 470-82-6 EC: 207-431-5 Index: Non-applicable REACH:01-2119967772-24-XXXX	<b>Cineole<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Flam. Liq. 3: H226; Skin Sens. 1B: H317 - Warning	1 - <5 %
CAS: 120-51-4 EC: 204-402-9 Index: 607-085-00-9 REACH:01-2119976371-33-XXXX	<b>Benzyl benzoate<sup>(1)</sup></b> ATP ATP01 Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 2: H411 - Warning	1 - <5 %
CAS: 52475-86-2 EC: 257-942-2 Index: Non-applicable REACH:Non-applicable	<b>1-methyl-4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde<sup>(1)</sup></b> Not classified Regulation 1272/2008	1 - <5 %
CAS: 99-85-4 EC: 202-794-6 Index: Non-applicable REACH:01-2120780478-40-XXXX	<b>p-mentha-1,4-diene<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Chronic 2: H411; Flam. Liq. 3: H226; Repr. 2: H361 - Warning	1 - <5 %
CAS: 5392-40-5 EC: 226-394-6 Index: 605-019-00-3 REACH:01-2119462829-23-XXXX	<b>Citral<sup>(1)</sup></b> ATP CLP00 Regulation 1272/2008 Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	1 - <5 %
CAS: 112-31-2 EC: 203-957-4 Index: Non-applicable REACH:01-2119967771-26-XXXX	<b>Decanal<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Aquatic Chronic 3: H412; Eye Irrit. 2: H319 - Warning	1 - <5 %
CAS: 99-86-5 EC: 202-795-1 Index: 601-095-00-7 REACH:01-2120766853-42-XXXX	<b>P-mentha-1,3-diene<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Sens. 1B: H317 - Danger	1 - <5 %
CAS: 142-19-8 EC: 205-527-1 Index: Non-applicable REACH:01-2119488961-23-XXXX	<b>Allyl heptanoate<sup>(1)</sup></b> Self-classified Regulation 1272/2008 Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 3: H412 - Danger	0,1 - <1 %

<sup>(1)</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Identification	Chemical name/Classification	Concentration
CAS: 79-92-5 EC: 201-234-8 Index: Non-applicable REACH:01-2119446293-40-XXXX	<b>Camphene<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Flam. Sol. 2: H228 - Warning	
CAS: 78-70-6 EC: 201-134-4 Index: 603-235-00-2 REACH:01-2119474016-42-XXXX	<b>Linalool<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	
CAS: 106-23-0 EC: 203-376-6 Index: Non-applicable REACH:01-2119474900-37-XXXX	<b>Citronellal<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	
CAS: 99-87-6 EC: 202-796-7 Index: 601-094-00-1 REACH:01-2119881770-31-XXXX	<b>p-cymene<sup>(1)</sup></b> ATP ATP17	0,1 - <1 %
	Regulation 1272/2008 Acute Tox. 3: H331; Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226 - Danger	
CAS: 123-35-3 EC: 204-622-5 Index: Non-applicable REACH:01-2119514321-56-XXXX	<b>7-methyl-3-methyleneocta-1,6-diene<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Danger	
CAS: 128-37-0 EC: 204-881-4 Index: Non-applicable REACH:01-2119565113-46-XXXX	<b>2,6-di-tert-butyl-p-cresol<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning	
CAS: 3407-42-9 EC: 222-294-1 Index: Non-applicable REACH:01-2119979583-21-XXXX	<b>3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Repr. 2: H361 - Warning	
CAS: 106-22-9 EC: 203-375-0 Index: Non-applicable REACH:01-2119453995-23-XXXX	<b>Citronellol<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning	
CAS: 105-87-3 EC: 203-341-5 Index: Non-applicable REACH:01-2119973480-35-XXXX	<b>Geranyl acetate<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Aquatic Chronic 3: H412; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 99-83-2 EC: 202-792-5 Index: Non-applicable REACH:Non-applicable	<b>p-mentha-1,5-diene<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 3: H226 - Danger	
CAS: 7785-26-4 EC: 232-077-3 Index: Non-applicable REACH:01-2119979519-16-XXXX	<b>(-)-pin-2(3)-ene<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Danger	
CAS: 71048-82-3 EC: 275-156-8 Index: Non-applicable REACH:01-2119535122-53-XXXX	<b>[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one<sup>(1)</sup></b> Self-classified	0,1 - <1 %
	Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	

<sup>(1)</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

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### SECTION 4: FIRST AID MEASURES (continued)

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

### SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**For emergency responders:**

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**SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Minimum Temp.: -

Maximum Temp.: -

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

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

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

**DNEL (Workers):**

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
(r)-p-mentha-1,8-diene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	9,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	66,7 mg/m <sup>3</sup>	Non-applicable
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,45 mg/m <sup>3</sup>	Non-applicable
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,52 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,6 mg/m <sup>3</sup>	Non-applicable
(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one CAS: 79-77-6 EC: 201-224-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	12,7 mg/m <sup>3</sup>	Non-applicable
Resin acids and Rosin acids, hydrogenated, Me esters CAS: 8050-15-5 EC: 232-476-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	7,77 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	10 mg/m <sup>3</sup>
Cineole CAS: 470-82-6 EC: 207-431-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	7,05 mg/m <sup>3</sup>	Non-applicable
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,6 mg/kg	Non-applicable
	Inhalation	102 mg/m <sup>3</sup>	Non-applicable	5,1 mg/m <sup>3</sup>	Non-applicable
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,833 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,939 mg/m <sup>3</sup>	Non-applicable
Citral CAS: 5392-40-5 EC: 226-394-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m <sup>3</sup>	Non-applicable
Decanal CAS: 112-31-2 EC: 203-957-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	14,1 mg/kg	Non-applicable	7,05 mg/kg	Non-applicable
	Inhalation	49,71 mg/m <sup>3</sup>	124,28 mg/m <sup>3</sup>	24,86 mg/m <sup>3</sup>	62,14 mg/m <sup>3</sup>
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,833 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,939 mg/m <sup>3</sup>	Non-applicable
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,84 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,97 mg/m <sup>3</sup>	Non-applicable
Camphene CAS: 79-92-5 EC: 201-234-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	1,25 mg/kg	Non-applicable	0,21 mg/kg	Non-applicable
	Inhalation	110,19 mg/m <sup>3</sup>	Non-applicable	110,19 mg/m <sup>3</sup>	Non-applicable
Linalool CAS: 78-70-6 EC: 201-134-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	24,58 mg/m <sup>3</sup>	Non-applicable
Citronellal CAS: 106-23-0 EC: 203-376-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m <sup>3</sup>	Non-applicable
p-cymene CAS: 99-87-6 EC: 202-796-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,88 mg/m <sup>3</sup>	Non-applicable

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,5 mg/m <sup>3</sup>	Non-applicable
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	13,2 mg/m <sup>3</sup>	Non-applicable
Citronellol CAS: 106-22-9 EC: 203-375-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	327,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	10 mg/m <sup>3</sup>	161,6 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	35,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	62,59 mg/m <sup>3</sup>	Non-applicable
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,76 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	6,03 mg/m <sup>3</sup>	Non-applicable
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,5 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
(r)-p-mentha-1,8-diene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	4,8 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	4,8 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	16,6 mg/m <sup>3</sup>	Non-applicable
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	Oral	Non-applicable	Non-applicable	0,35 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,35 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,61 mg/m <sup>3</sup>	Non-applicable
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	Oral	Non-applicable	Non-applicable	0,26 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,26 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,9 mg/m <sup>3</sup>	Non-applicable
(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one CAS: 79-77-6 EC: 201-224-3	Oral	Non-applicable	Non-applicable	1,8 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,6 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,1 mg/m <sup>3</sup>	Non-applicable
Resin acids and Rosin acids, hydrogenated, Me esters CAS: 8050-15-5 EC: 232-476-2	Oral	Non-applicable	Non-applicable	3,885 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,885 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Cineole CAS: 470-82-6 EC: 207-431-5	Oral	Non-applicable	Non-applicable	600 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,74 mg/m <sup>3</sup>	Non-applicable
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Oral	78 mg/kg	Non-applicable	0,4 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,3 mg/kg	Non-applicable
	Inhalation	25 mg/m <sup>3</sup>	Non-applicable	1,25 mg/m <sup>3</sup>	Non-applicable
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	Oral	Non-applicable	Non-applicable	0,417 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,417 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,725 mg/m <sup>3</sup>	Non-applicable
Citral CAS: 5392-40-5 EC: 226-394-6	Oral	Non-applicable	Non-applicable	0,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,7 mg/m <sup>3</sup>	Non-applicable

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Decanal CAS: 112-31-2 EC: 203-957-4	Oral	7,05 mg/kg	Non-applicable	3,52 mg/kg	Non-applicable
	Dermal	7,05 mg/kg	Non-applicable	3,52 mg/kg	Non-applicable
	Inhalation	12,26 mg/m <sup>3</sup>	30,65 mg/m <sup>3</sup>	6,13 mg/m <sup>3</sup>	15,32 mg/m <sup>3</sup>
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	Oral	Non-applicable	Non-applicable	0,417 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,417 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,725 mg/m <sup>3</sup>	Non-applicable
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	Oral	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,42 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,73 mg/m <sup>3</sup>	Non-applicable
Camphene CAS: 79-92-5 EC: 201-234-8	Oral	0,625 mg/kg	Non-applicable	0,1 mg/kg	Non-applicable
	Dermal	0,625 mg/kg	Non-applicable	0,1 mg/kg	Non-applicable
	Inhalation	54,3 mg/m <sup>3</sup>	Non-applicable	54,3 mg/m <sup>3</sup>	Non-applicable
Linalool CAS: 78-70-6 EC: 201-134-4	Oral	Non-applicable	Non-applicable	2,49 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,33 mg/m <sup>3</sup>	Non-applicable
Citronellal CAS: 106-23-0 EC: 203-376-6	Oral	Non-applicable	Non-applicable	0,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,7 mg/m <sup>3</sup>	Non-applicable
p-cymene CAS: 99-87-6 EC: 202-796-7	Oral	Non-applicable	Non-applicable	0,125 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,125 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,22 mg/m <sup>3</sup>	Non-applicable
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,86 mg/m <sup>3</sup>	Non-applicable
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	Oral	Non-applicable	Non-applicable	1,88 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,88 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,26 mg/m <sup>3</sup>	Non-applicable
Citronellol CAS: 106-22-9 EC: 203-375-0	Oral	Non-applicable	Non-applicable	13,8 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	196,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	10 mg/m <sup>3</sup>	47,8 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	Oral	Non-applicable	Non-applicable	8,9 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	17,75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	15,4 mg/m <sup>3</sup>	Non-applicable
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	Oral	Non-applicable	Non-applicable	0,628 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,628 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,07 mg/m <sup>3</sup>	Non-applicable
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	Oral	Non-applicable	Non-applicable	0,25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,43 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification					
(r)-p-mentha-1,8-diene CAS: 5989-27-5 EC: 227-813-5	STP	1,8 mg/L	Fresh water	0,014 mg/L	
	Soil	0,763 mg/kg	Marine water	0,0014 mg/L	
	Intermittent	Non-applicable	Sediment (Fresh water)	3,85 mg/kg	
	Oral	0,133 g/kg	Sediment (Marine water)	0,385 mg/kg	
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	STP	10 mg/L	Fresh water	0,008 mg/L	
	Soil	0,038 mg/kg	Marine water	0,0084 mg/L	
	Intermittent	0,084 mg/L	Sediment (Fresh water)	0,214 mg/kg	
	Oral	0,0233 g/kg	Sediment (Marine water)	0,021 mg/kg	

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification				
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	STP	0,2 mg/L	Fresh water	0,000634 mg/L
	Soil	0,0291 mg/kg	Marine water	0,000063 mg/L
	Intermittent	0,00634 mg/L	Sediment (Fresh water)	0,147 mg/kg
	Oral	0,01031 g/kg	Sediment (Marine water)	0,0147 mg/kg
(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one CAS: 79-77-6 EC: 201-224-3	STP	1 mg/L	Fresh water	0,004 mg/L
	Soil	0,051 mg/kg	Marine water	0 mg/L
	Intermittent	0,04 mg/L	Sediment (Fresh water)	0,151 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,015 mg/kg
Resin acids and Rosin acids, hydrogenated, Me esters CAS: 8050-15-5 EC: 232-476-2	STP	1,26 mg/L	Fresh water	0,027 mg/L
	Soil	15,35 mg/kg	Marine water	0,003 mg/L
	Intermittent	0,27 mg/L	Sediment (Fresh water)	77,05 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	7,7 mg/kg
Cineole CAS: 470-82-6 EC: 207-431-5	STP	10 mg/L	Fresh water	0,057 mg/L
	Soil	0,25 mg/kg	Marine water	0,0057 mg/L
	Intermittent	0,57 mg/L	Sediment (Fresh water)	1,425 mg/kg
	Oral	0,04 g/kg	Sediment (Marine water)	0,142 mg/kg
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	STP	100 mg/L	Fresh water	0,017 mg/L
	Soil	2,12 mg/kg	Marine water	0,002 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	10,66 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,07 mg/kg
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	STP	10 mg/L	Fresh water	0,003 mg/L
	Soil	0,423 mg/kg	Marine water	0 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	0,49 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,049 mg/kg
Citral CAS: 5392-40-5 EC: 226-394-6	STP	1,6 mg/L	Fresh water	0,007 mg/L
	Soil	0,021 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,068 mg/L	Sediment (Fresh water)	0,125 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,013 mg/kg
Decanal CAS: 112-31-2 EC: 203-957-4	STP	3,16 mg/L	Fresh water	0,00117 mg/L
	Soil	0,019 mg/kg	Marine water	0,000117 mg/L
	Intermittent	0,0117 mg/L	Sediment (Fresh water)	0,097 mg/kg
	Oral	0,313 g/kg	Sediment (Marine water)	0,01 mg/kg
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	STP	10 mg/L	Fresh water	0,002 mg/L
	Soil	0,023 mg/kg	Marine water	0 mg/L
	Intermittent	0,017 mg/L	Sediment (Fresh water)	0,196 mg/kg
	Oral	0,008333 g/kg	Sediment (Marine water)	0,02 mg/kg
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	STP	10 mg/L	Fresh water	0,00012 mg/L
	Soil	0,002 mg/kg	Marine water	0,000012 mg/L
	Intermittent	0,0012 mg/L	Sediment (Fresh water)	0,012 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,001 mg/kg
Camphene CAS: 79-92-5 EC: 201-234-8	STP	10 mg/L	Fresh water	0,001 mg/L
	Soil	0,021 mg/kg	Marine water	0 mg/L
	Intermittent	0,001 mg/L	Sediment (Fresh water)	0,026 mg/kg
	Oral	0,00208 g/kg	Sediment (Marine water)	0,003 mg/kg
Linalool CAS: 78-70-6 EC: 201-134-4	STP	10 mg/L	Fresh water	0,2 mg/L
	Soil	0,327 mg/kg	Marine water	0,02 mg/L
	Intermittent	2 mg/L	Sediment (Fresh water)	2,22 mg/kg
	Oral	0,0078 g/kg	Sediment (Marine water)	0,222 mg/kg

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification				
Citronellal CAS: 106-23-0 EC: 203-376-6	STP	4 mg/L	Fresh water	0,009 mg/L
	Soil	0,027 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,087 mg/L	Sediment (Fresh water)	0,159 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,016 mg/kg
p-cymene CAS: 99-87-6 EC: 202-796-7	STP	10 mg/L	Fresh water	0,004 mg/L
	Soil	0,302 mg/kg	Marine water	0 mg/L
	Intermittent	0,037 mg/L	Sediment (Fresh water)	1,52 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,152 mg/kg
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	STP	0,17 mg/L	Fresh water	0,000199 mg/L
	Soil	0,04769 mg/kg	Marine water	0,00002 mg/L
	Intermittent	0,00199 mg/L	Sediment (Fresh water)	0,0996 mg/kg
	Oral	0,00833 g/kg	Sediment (Marine water)	0,00996 mg/kg
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	STP	0,1 mg/L	Fresh water	0,00296 mg/L
	Soil	0,0128 mg/kg	Marine water	0,000296 mg/L
	Intermittent	0,0259 mg/L	Sediment (Fresh water)	0,0725 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00725 mg/kg
Citronellol CAS: 106-22-9 EC: 203-375-0	STP	580 mg/L	Fresh water	0,002 mg/L
	Soil	0,004 mg/kg	Marine water	0 mg/L
	Intermittent	0,024 mg/L	Sediment (Fresh water)	0,026 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,003 mg/kg
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	STP	8 mg/L	Fresh water	0,00372 mg/L
	Soil	0,086 mg/kg	Marine water	0,000372 mg/L
	Intermittent	0,0372 mg/L	Sediment (Fresh water)	0,442 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,044 mg/kg
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	STP	0,2 mg/L	Fresh water	0,000606 mg/L
	Soil	0,0317 mg/kg	Marine water	0,000061 mg/L
	Intermittent	0,00303 mg/L	Sediment (Fresh water)	0,157 mg/kg
	Oral	0,00876 g/kg	Sediment (Marine water)	0,0157 mg/kg
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	STP	2,41 mg/L	Fresh water	0,007 mg/L
	Soil	0,177 mg/kg	Marine water	0,0007 mg/L
	Intermittent	0,0035 mg/L	Sediment (Fresh water)	0,906 mg/kg
	Oral	0,000074 g/kg	Sediment (Marine water)	0,0906 mg/kg

**8.2 Exposure controls:**



A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.4 mm)		EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection



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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	47,5 % weight
V.O.C. density at 20 °C:	Non-applicable
Average carbon number:	10
Average molecular weight:	138,9 g/mol

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Light yellow , Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	>40 °C
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

**Product description:**

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

**Flammability:**

Flash Point:	58 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Not available
Upper flammability limit:	Not available

**Particle characteristics:**

Median equivalent diameter:	Non-applicable
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**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

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### SECTION 10: STABILITY AND REACTIVITY (continued)

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Precaution	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

#### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

The experimental information related to the toxicological properties of the product itself is not available

##### Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

##### A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

##### B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

##### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: (r)-p-mentha-1,8-diene (3); 7-methyl-3-methyleneocta-1,6-diene (2B); 2,6-di-tert-butyl-p-cresol (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

##### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

##### F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### H- Aspiration hazard:

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**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

The consumption of a considerable dose can cause pulmonary damage.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
(r)-p-mentha-1,8-diene CAS: 5989-27-5 EC: 227-813-5	>2000 mg/kg	>2000 mg/kg	
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	>2000 mg/kg	>2000 mg/kg	
p-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	>2000 mg/kg	>2000 mg/kg	
(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one CAS: 79-77-6 EC: 201-224-3	>2000 mg/kg	>2000 mg/kg	
Resin acids and Rosin acids, hydrogenated, Me esters CAS: 8050-15-5 EC: 232-476-2	>2000 mg/kg	>2000 mg/kg	
Cineole CAS: 470-82-6 EC: 207-431-5	2480 mg/kg	>2000 mg/kg	Rat
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	500 mg/kg	>2000 mg/kg	Rat
1-methyl-4-(4-methyl-3-pentenyl)cyclohex-3-ene-1-carbaldehyde CAS: 52475-86-2 EC: 257-942-2	>2000 mg/kg	>2000 mg/kg	
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	3850 mg/kg	>2000 mg/kg	Rat
Citral CAS: 5392-40-5 EC: 226-394-6	4950 mg/kg	2250 mg/kg	Rat Rabbit
Decanal CAS: 112-31-2 EC: 203-957-4	41750 mg/kg	>2000 mg/kg	Rat
p-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	1680 mg/kg	>2000 mg/kg	Rat
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	218 mg/kg	810 mg/kg	Rat Rabbit
p-cymene CAS: 99-87-6 EC: 202-796-7	5800 mg/kg	12200 mg/kg	Rat Rabbit
Camphene CAS: 79-92-5 EC: 201-234-8	>5000 mg/kg	8189 mg/kg	Rat Rabbit
		>5 mg/L	

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**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Linalool CAS: 78-70-6 EC: 201-134-4	LD50 oral	3000 mg/kg	Rat
	LD50 dermal	5610 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
Citronellal CAS: 106-23-0 EC: 203-376-6	LD50 oral	2500 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	LD50 oral	10000 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
Citronellol CAS: 106-22-9 EC: 203-375-0	LD50 oral	3450 mg/kg	Rat
	LD50 dermal	2650 mg/kg	
	LC50 inhalation	>20 mg/L	
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
p-mentha-1,5-diene CAS: 99-83-2 EC: 202-792-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	LD50 oral	500 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
[1 $\alpha$ (E),2 $\beta$ ]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	LD50 oral	1400 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration		Species	Genus
	LC50	EC50		
(r)-p-mentha-1,8-diene CAS: 5989-27-5 EC: 227-813-5	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	LC50	4.2 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	52 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	36 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Concentration		Species	Genus
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	LC50	0,8 mg/L (96 h)	Danio rerio	Fish
	EC50	0,63 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0,7 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
(E)-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one CAS: 79-77-6 EC: 201-224-3	LC50	5,09 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	20,9 mg/L (72 h)	Scenedesmus subspicatus	Algae
Resin acids and Rosin acids, hydrogenated, Me esters CAS: 8050-15-5 EC: 232-476-2	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		Algae
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	LC50	2,8 mg/L (96 h)	N/A	Fish
	EC50	10,2 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Citral CAS: 5392-40-5 EC: 226-394-6	LC50	6,1 mg/L (24 h)	Oryzias latipes	Fish
	EC50	11 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	16 mg/L (72 h)	Scenedesmus subspicatus	Algae
Decanal CAS: 112-31-2 EC: 203-957-4	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	LC50	Non-applicable		
	EC50	1,7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	LC50	0,12 mg/L (96 h)	Danio rerio	Fish
	EC50	0,89 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4,6 mg/L (72 h)	Desmodesmus subspicatus	Algae
Camphene CAS: 79-92-5 EC: 201-234-8	LC50	0,72 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	46 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
p-cymene CAS: 99-87-6 EC: 202-796-7	LC50	48 mg/L (96 h)	Cypronodon variegatus	Fish
	EC50	3,7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	LC50	0,57 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	0,61 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	LC50	17,6 mg/L (96 h)	Danio rerio	Fish
	EC50	2,59 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	47 mg/L (72 h)	Desmodesmus subspicatus	Algae
Geranyl acetate CAS: 105-87-3 EC: 203-341-5	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	LC50	0,3 mg/L (96 h)	Danio rerio	Fish
	EC50	0,47 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	LC50	0,97 mg/L (96 h)	Oryzias latipes	Fish
	EC50	Non-applicable		
	EC50	2,5 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

**Chronic toxicity:**

Identification	Concentration		Species	Genus
2,6-di-tert-butyl-p-cresol	NOEC	0,053 mg/L	Oryzias latipes	Fish
CAS: 128-37-0 EC: 204-881-4	NOEC	0,069 mg/L	Daphnia magna	Crustacean
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol	NOEC	0,14 mg/L	N/A	Fish
CAS: 3407-42-9 EC: 222-294-1	NOEC	Non-applicable		
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one	NOEC	Non-applicable		
CAS: 71048-82-3 EC: 275-156-8	NOEC	0,35 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

**Substance-specific information:**

Identification	Degradability		Biodegradability	
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	53 %
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	BOD5	Non-applicable	Concentration	2 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	81 %
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	27 %
Citral CAS: 5392-40-5 EC: 226-394-6	BOD5	0,56 g O2/g	Concentration	100 mg/L
	COD	1,99 g O2/g	Period	28 days
	BOD5/COD	0,28	% Biodegradable	92 %
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	BOD5	Non-applicable	Concentration	15 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	40 %
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	81 %
Camphene CAS: 79-92-5 EC: 201-234-8	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	4 %
Linalool CAS: 78-70-6 EC: 201-134-4	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
p-cymene CAS: 99-87-6 EC: 202-796-7	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	86 %
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	BOD5	Non-applicable	Concentration	50 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	4,5 %
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	BOD5	Non-applicable	Concentration	4 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	13,81 %
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	BOD5	Non-applicable	Concentration	2 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	78 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
	[1 $\alpha$ (E),2 $\beta$ ]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	BOD5	Non-applicable	Concentration
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	16 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
	P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	BCF
	Pow Log	4.29
	Potential	High
Cineole CAS: 470-82-6 EC: 207-431-5	BCF	
	Pow Log	2.74
	Potential	
Citral CAS: 5392-40-5 EC: 226-394-6	BCF	10
	Pow Log	3.45
	Potential	Low
Decanal CAS: 112-31-2 EC: 203-957-4	BCF	420
	Pow Log	3.76
	Potential	High
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	BCF	473
	Pow Log	2.99
	Potential	High
Camphene CAS: 79-92-5 EC: 201-234-8	BCF	1290
	Pow Log	4.22
	Potential	Very High
Linalool CAS: 78-70-6 EC: 201-134-4	BCF	
	Pow Log	2.97
	Potential	
Citronellal CAS: 106-23-0 EC: 203-376-6	BCF	280
	Pow Log	3.53
	Potential	High
p-cymene CAS: 99-87-6 EC: 202-796-7	BCF	286
	Pow Log	4.1
	Potential	High
7-methyl-3-methyleneocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	BCF	324
	Pow Log	5.29
	Potential	High
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	BCF	1365
	Pow Log	5.1
	Potential	Very High
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	BCF	1985
	Pow Log	
	Potential	Very High
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	BCF	1250
	Pow Log	4.5
	Potential	Very High
[1 $\alpha$ (E),2 $\beta$ ]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	BCF	81
	Pow Log	4.2
	Potential	Moderate

12.4 Mobility in soil:

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Absorption/desorption		Volatility	
Ethyl 2,3-epoxy-3-phenylbutyrate CAS: 77-83-8 EC: 201-061-8	Koc	240	Henry	Non-applicable
	Conclusion	Moderate	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
P-mentha-1,4(8)-diene CAS: 586-62-9 EC: 209-578-0	Koc	1120	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	2,865E-2 N/m (25 °C)	Moist soil	Non-applicable
Cineole CAS: 470-82-6 EC: 207-431-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3,24E-2 N/m (25 °C)	Moist soil	Non-applicable
Benzyl benzoate CAS: 120-51-4 EC: 204-402-9	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	4,626E-2 N/m (25 °C)	Moist soil	Non-applicable
p-mentha-1,4-diene CAS: 99-85-4 EC: 202-794-6	Koc	8038	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	2,991E-2 N/m (25 °C)	Moist soil	Non-applicable
Decanal CAS: 112-31-2 EC: 203-957-4	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,811E-2 N/m (25 °C)	Moist soil	Non-applicable
P-mentha-1,3-diene CAS: 99-86-5 EC: 202-795-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,79E-2 N/m (25 °C)	Moist soil	Non-applicable
Allyl heptanoate CAS: 142-19-8 EC: 205-527-1	Koc	968.3	Henry	112 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
Camphene CAS: 79-92-5 EC: 201-234-8	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	1,098E-2 N/m (205,93 °C)	Moist soil	Non-applicable
p-cymene CAS: 99-87-6 EC: 202-796-7	Koc	5011.87	Henry	1114,58 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	2,835E-2 N/m (25 °C)	Moist soil	Yes
7-methyl-3-methylenoocta-1,6-diene CAS: 123-35-3 EC: 204-622-5	Koc	1300	Henry	6515,2 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Yes
2,6-di-tert-butyl-p-cresol CAS: 128-37-0 EC: 204-881-4	Koc	8183	Henry	3,42E-1 Pa·m <sup>3</sup> /mol
	Conclusion		Dry soil	Yes
	Surface tension	1,255E-2 N/m (258,85 °C)	Moist soil	Yes
3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol CAS: 3407-42-9 EC: 222-294-1	Koc	209	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
p-mentha-1,5-diene CAS: 99-83-2 EC: 202-792-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,958E-2 N/m (25 °C)	Moist soil	Non-applicable
(-)-pin-2(3)-ene CAS: 7785-26-4 EC: 232-077-3	Koc	2180	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable
[1α(E),2β]-1-(2,6,6-trimethylcyclohex-3-en-1-yl)but-2-en-1-one CAS: 71048-82-3 EC: 275-156-8	Koc	1260	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable

**12.5 Results of PBT and vPvB assessment:**

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Product fails to meet PBT/vPvB criteria

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product fails to meet the criteria.

**12.7 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
07 01 04*	other organic solvents, washing liquids and mother liquors	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP3 Flammable, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR 2021 and RID 2021:



- 14.1 UN number or ID number:** UN1197
- 14.2 UN proper shipping name:** EXTRACTS, LIQUID
- 14.3 Transport hazard class(es):** 3
- Labels: 3
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
- Special regulations: 601
- Tunnel restriction code: D/E
- Physico-Chemical properties: see section 9
- Limited quantities: 5 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 40-20:

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**SECTION 14: TRANSPORT INFORMATION (continued)**



- 14.1 UN number or ID number:** UN1197
- 14.2 UN proper shipping name:** EXTRACTS, LIQUID
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**  
Special regulations: 955, 223  
EmS Codes: F-E, S-D  
Physico-Chemical properties: see section 9  
Limited quantities: 5 L  
Segregation group: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2023:



- 14.1 UN number or ID number:** UN1197
- 14.2 UN proper shipping name:** EXTRACTS, LIQUID
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable  
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable  
Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable  
Article 95, REGULATION (EU) No 528/2012: Citronellal  
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000
E1	ENVIRONMENTAL HAZARDS	100	200

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ...):**

Shall not be used in:  
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,  
—tricks and jokes,  
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

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**SECTION 15: REGULATORY INFORMATION (continued)**

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

Non-applicable

**Texts of the legislative phrases mentioned in section 2:**

H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H400: Very toxic to aquatic life.  
H304: May be fatal if swallowed and enters airways.  
H226: Flammable liquid and vapour.  
H411: Toxic to aquatic life with long lasting effects.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.  
Acute Tox. 3: H331 - Toxic if inhaled.  
Acute Tox. 4: H302 - Harmful if swallowed.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
Flam. Sol. 2: H228 - Flammable solid.  
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1: H317 - May cause an allergic skin reaction.  
Skin Sens. 1B: H317 - May cause an allergic skin reaction.

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

**Other information:**

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**SECTION 16: OTHER INFORMATION (continued)**

Safety Data Sheet author's

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The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

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