

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Code:	O.E. BERGAMOTTO
Product name	Bergamot essential oil
INCI	Aurantium Bergamia Fruit Oil
EC number	289-612-9
CAS number	89957-91-5

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

Intended use                      **Essential oil**

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

Name	OLEOLIO SRL
Full address	Contrada Cosentino
District and Country	89030 San Carlo (RC)
	+39 328 41111 98

e-mail address of the competent person

responsible for the Safety Data Sheet                      [info@oleolio.com](mailto:info@oleolio.com)

#### 1.4. Emergency telephone number

For urgent inquiries refer to                      **+39 328 41111 98 (office hours)**

### SECTION 2. Hazards identification

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

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

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Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:                    Danger

Hazard statements:

- H226**                    Flammable liquid and vapour.
- H304**                    May be fatal if swallowed and enters airways.
- H319**                    Causes serious eye irritation.
- H315**                    Causes skin irritation.
- H317**                    May cause an allergic skin reaction.
- H410**                    Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P210**                    Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280**                    Wear protective gloves/ protective clothing / eye protection / face protection.
- P370+P378**            In case of fire: use . . . to extinguish.
- P302+P352**            IF ON SKIN: Wash with plenty of water / . . .
- P305+P351+P338**    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501**                    Dispose of the product / container in accordance with the legislation in force concerning waste treatment.

**Contains:**                    O.E. BERGAMOTTO

289-612-9

Nr. EC:

The product is classified both in acute and long-term aquatic hazard categories: it is possible to use only hazard statement H410 on the label.

## 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

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## 3.1. Substances

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>(R)-p-mentha-1,8-diene</b>		
INDEX 601-096-00-2	$37,5 \leq x < 40$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, Classification note according to Annex VI to the CLP Regulation: C
EC 227-813-5		
CAS 5989-27-5		
<b>Linalyl acetate</b>		
INDEX -	$30 \leq x < 32,5$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 204-116-4		
CAS 115-95-7		
<b>dl-linalool</b>		
INDEX 603-235-00-2	$10,5 \leq x < 12$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 201-134-4		
CAS 78-70-6		
<b>Pin-2(10)ene</b>		
INDEX -	$5 \leq x < 6$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 204-872-5		
CAS 127-91-3		
<b>7-methyl-3-methyleneocta-1,6-diene</b>		
INDEX -	$1 \leq x < 1,5$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 204-622-5		
CAS 123-35-3		
<b>Pin-2 (3) -ene</b>		
INDEX -	$0,8 \leq x < 0,9$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 201-291-9		
CAS 80-56-8		
<b>Geranyl acetate</b>		
INDEX -	$0,7 \leq x < 0,8$	Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC 203-341-5		
CAS 105-87-3		
<b>2-methyl-6-(4-methylcyclohex-3-en-1-ylidene)hept-2-ene</b>		
INDEX -	$0,35 \leq x < 0,4$	Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 207-805-8		
CAS 495-62-5		
<b>Caryophyllene</b>		
INDEX -	$0,3 \leq x < 0,35$	Asp. Tox. 1 H304, Skin Sens. 1B H317
EC 201-746-1		
CAS 87-44-5		
<b>Citral</b>		
INDEX 605-019-00-3	$0,25 \leq x < 0,3$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

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EC 226-394-6

CAS 5392-40-5

REACH Reg. 01-2119462829-23-XXXX

## **p-mentha-1,4-diene**

INDEX - 0,25 ≤ x < 0,3 Repr. 2 H361, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC 202-796-7

CAS 99-85-4

## **Thujene**

INDEX - 0,2 ≤ x < 0,25 Flam. Liq. 3 H226, Skin Sens. 1 H317

EC 220-686-7

CAS 2867-05-2

## **nerol**

INDEX - 0,15 ≤ x < 0,2 Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

EC 203-378-7

CAS 106-25-2

## **p-mentha-1,3-diene**

INDEX 601-095-00-7 0,1 ≤ x < 0,15 Flam. Liq. 3 H226, Acute Tox. 4 H302, Asp. Tox. 1 H304, Skin Sens. 1 H317, Aquatic Chronic 2 H411  
ATE Oral: 500 mg/kg

EC 202-795-1

CAS 99-86-5

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### **3.2. Mixtures**

Information not relevant

## **SECTION 4. First aid measures**

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

**EYES:** Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

**INGESTION:** Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

**INHALATION:** Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

Specific information on symptoms and effects caused by the product are unknown.

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DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

IF SWALLOWED: Immediately call a POISON CENTER / doctor / . . .

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

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

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

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Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

## 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

3

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

TLV-ACGIH

ACGIH 2023

#### (R)-p-mentha-1,8-diene

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,014	mg/l
Normal value in marine water	0,0014	mg/l
Normal value for fresh water sediment	3,85	mg/kg
Normal value for marine water sediment	0,385	mg/kg
Normal value of STP microorganisms	18	mg/l

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				4,8 mg/kg bw/d				
Inhalation				16,6 mg/m3				66,7 mg/m3
Skin				4,8 mg/kg bw/d				9,5 mg/kg bw/d

#### Geranyl acetate

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Predicted no-effect concentration - PNEC		
Normal value in fresh water	3,72	ug/l
Normal value in marine water	372	ng/l
Normal value for fresh water sediment	442	ug/l
Normal value for marine water sediment	44,2	ug/l
Normal value of STP microorganisms	8	mg/l

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				8,9 mg/kg bw/d				8,9
Inhalation				15,4 mg/m3				62,59 mg/m3
Skin				17,75 mg/kg bw/d				35,5 mg/kg bw/d

Pin-2 (3) -ene Threshold Limit Value					
Type	Country	TWA/8h		STEL/15min	Remarks / Observations
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH			20		

Predicted no-effect concentration - PNEC		
Normal value in fresh water	606	ng/l
Normal value in marine water	60,6	ng/l
Normal value for fresh water sediment	157	ug/kg
Normal value for marine water sediment	15,7	ug/kg
Normal value of STP microorganisms	200	ug/l

nerol		
Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00745	mg/l
Normal value in marine water	0,000745	mg/l
Normal value for fresh water sediment	0,133	mg/kg
Normal value for marine water sediment	0,0133	mg/kg
Normal value of STP microorganisms	12,9	mg/l

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,62 mg/kg bw/d				
Inhalation				1,09 mg/m3				4,4 mg/m3
Skin				0,62 mg/kg bw/d				1,25 mg/kg bw/d

p-mentha-1,4-diene		
Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00279	mg/l
Normal value in marine water	0,000279	mg/l
Normal value for fresh water sediment	0,49	mg/kg

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Normal value for marine water sediment	0,049	mg/kg
Normal value of STP microorganisms	10	mg/l

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,417 mg/kg bw/d				
Inhalation				0,725 mg/m3				2,939 mg/m3
Skin				0,417 mg/kg bw/d				0,833 mg/kg bw/d

p-mentha-1,3-diene								
Predicted no-effect concentration - PNEC								
Normal value in fresh water				0,0017				mg/l
Normal value in marine water				0,00017				mg/l
Normal value for fresh water sediment				0,196				mg/kg
Normal value for marine water sediment				0,0196				mg/kg
Normal value of STP microorganisms				0,1				mg/l

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,416 mg/kg bw/d				
Inhalation				0,724 mg/m3				2,939 mg/m3
Skin				0,416 mg/kg bw/d				0,833 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.



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Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

## EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

## RESPIRATORY PROTECTION

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

## ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	liquid	
Colour	yellow	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	174 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	$23 \leq T \leq 60$ °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	
Relative vapour density	not available	
Particle characteristics	not applicable	

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

### 10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

### 10.5. Incompatible materials

Information not available

### 10.6. Hazardous decomposition products

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

## SECTION 11. Toxicological information

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

#### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

#### Information on likely routes of exposure

Information not available

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

Information not available

#### Interactive effects

Information not available

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## ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)
(R)-p-mentha-1,8-diene	
LD50 (Dermal):	> 5000 mg/kg
LD50 (Oral):	4400 mg/kg rat
dl-linalool	
LD50 (Dermal):	5610 mg/kg rabbit
LD50 (Oral):	2200 mg/kg topo
7-methyl-3-methyleneocta-1,6-diene	
LD50 (Dermal):	> 5000 mg/kg
LD50 (Oral):	> 3380 mg/kg
Linalyl acetate	
LD50 (Dermal):	> 5000 mg/kg
LD50 (Oral):	14500 mg/kg
Pin-2(10)ene	
LD50 (Oral):	4700 mg/kg rat
Geranyl acetate	
LD50 (Oral):	6330 mg/kg
Citral	
LD50 (Dermal):	2250 mg/kg
LD50 (Oral):	6800 mg/kg
Pin-2 (3) -ene	
LD50 (Dermal):	5005 mg/kg rabbit
LD50 (Oral):	2100 mg/kg rat
Caryophyllene	
LD50 (Oral):	5000 mg/kg
p-mentha-1,4-diene	
LD50 (Dermal):	2000 mg/kg rat
LD50 (Oral):	2000 mg/kg rat
p-mentha-1,3-diene	
LD50 (Dermal):	2000 mg/kg

## SKIN CORROSION / IRRITATION

Causes skin irritation

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

## RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

## GERM CELL MUTAGENICITY

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Does not meet the classification criteria for this hazard class

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## ASPIRATION HAZARD

Toxic for aspiration

### 11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

### 12.1. Toxicity

(R)-p-mentha-1,8-diene

LC50 - for Fish	0,72 mg/l/96h
EC10 for Algae / Aquatic Plants	0,149 mg/l/72h
Chronic NOEC for Fish	37 mg/l
Chronic NOEC for Crustacea	0,153 mg/l

7-methyl-3-methyleneocta-1,6-diene

EC50 - for Crustacea	147 mg/l/48h
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Linalyl acetate

LC50 - for Fish	116 mg/l/96h
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Geranyl acetate

LC50 - for Fish	68,12 mg/l/96h
EC50 - for Crustacea	32 mg/l/48h

Citral

LC50 - for Fish	678 mg/l/96h
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Pin-2 (3) -ene  
LC50 - for Fish 0,28 mg/l/96h Pimephales promelas  
Chronic NOEC for Algae / Aquatic Plants 0,131 mg/l

p-mentha-1,4-diene  
LC50 - for Fish 2,792 mg/l/96h  
EC50 - for Crustacea 10,189 mg/l/48h  
EC50 - for Algae / Aquatic Plants 10,82 mg/l/72h

p-mentha-1,3-diene  
LC50 - for Fish 3,15 mg/l/96h  
EC50 - for Crustacea 1,7 mg/l/48h  
EC50 - for Algae / Aquatic Plants 3,7 mg/l/72h

## 12.2. Persistence and degradability

Information not available

## 12.3. Bioaccumulative potential

Information not available

## 12.4. Mobility in soil

Information not available

## 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

## 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

## 12.7. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

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## SECTION 14. Transport information

### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: UN 1197

### 14.2. UN proper shipping name

ADR / RID: EXTRACTS, LIQUID

IMDG: EXTRACTS, LIQUID

IATA: EXTRACTS, LIQUID

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

### 14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: NO



For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 30

IMDG: Special provision: 601

IMDG: EMS: F-E, S-D

IATA: Cargo:

Passengers:

Special provision:

Limited  
Quantities: 5  
lt

Limited  
Quantities: 5  
lt  
Maximum  
quantity: 220  
L  
Maximum  
quantity: 60 L

A3

Tunnel  
restriction  
code: (D/E)

Packaging  
instructions:  
366  
Packaging  
instructions:  
355

## 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: P5c-E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product  
Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment

Has not been performed / is not yet available a chemical safety assessment for the substance.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H302</b>	Harmful if swallowed.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration



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- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
  19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
  20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
  22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
  23. Delegated Regulation (UE) 2023/707
  24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
  24. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

## Note for users:

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

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

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

Provide appointed staff with adequate training on how to use chemical products.

## CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

## Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 14.