

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**  
Version: **2.0 en**  
Replaces version of: 2021-03-09  
Version: (1)

date of compilation: 2021-03-09  
Revision: 2024-03-04

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

### 1.1 Product identifier

Identification of the substance	<b>Peppermint oil pure, Italian</b>
Article number	7063
EC number	282-015-4
CAS number	8006-90-4
Alternative name(s)	Oleum Menthae piperitae

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

Relevant identified uses:	Laboratory chemical Laboratory and analytical use
Uses advised against:	Do not use for private purposes (household). Food, drink and animal feedingstuffs.

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

Carl Roth GmbH + Co. KG  
Schoemperlenstr. 3-5  
D-76185 Karlsruhe  
Germany

**Telephone:** +49 (0) 721 - 56 06 0  
**Telefax:** +49 (0) 721 - 56 06 149  
**e-mail:** [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)  
**Website:** [www.carlroth.de](http://www.carlroth.de)

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

**e-mail (competent person):** [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)

### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification acc. to GHS

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4S	Skin sensitisation	1	Skin Sens. 1	H317
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

### The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

## 2.2 Label elements

### Labelling

#### Signal word

Warning

#### Pictograms

GHS07, GHS09



#### Hazard statements

H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H319 Causes serious eye irritation  
H411 Toxic to aquatic life with long lasting effects

#### Precautionary statements

##### Precautionary statements - prevention

P273 Avoid release to the environment  
P280 Wear protective gloves/eye protection

##### Precautionary statements - response

P302+P352 IF ON SKIN: Wash with plenty of soap and water  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention

## 2.3 Other hazards

This material is combustible, but will not ignite readily.

### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Name of substance	Peppermint oil
CAS No	8006-90-4
EC No	282-015-4

#### Impurities/additives/constituents:

Name of substance	Identifier	Wt%
(-)-Menthol	CAS No 2216-51-5  EC No 218-690-9	25 - < 50
(-)-Menthone	CAS No 14073-97-3  EC No 237-926-1	10 - < 25
Eucalyptol	CAS No 470-82-6  EC No 207-431-5	1 - < 5
Isomenthone	CAS No 491-07-6  EC No 207-727-4	1 - < 5
L(-)-Limonene	CAS No 5989-54-8  EC No 227-815-6  Index No 601-029-00-7	1 - < 5
$\beta$ -Pinene	CAS No 127-91-3  EC No 204-872-5	< 1
DL- $\alpha$ -Pinene	CAS No 80-56-8  EC No 201-291-9	< 1

#### Remarks

For full text of abbreviations: see SECTION 16

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures



##### General notes

Take off contaminated clothing.

##### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

##### Following skin contact

Wash with plenty of soap and water. In case of skin reactions, consult a physician. In case of skin irritation, consult a physician.

##### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

##### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

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

Irritation, Allergic reactions

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

none

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media



##### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!  
water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

water jet

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

Combustible.

##### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), May produce toxic fumes of carbon monoxide if burning.

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### SECTION 6: Accidental release measures

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



##### For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

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

##### Advice on how to contain a spill

Covering of drains.

##### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

##### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation.

##### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

##### Measures to protect the environment

Avoid release to the environment.

##### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

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

Keep container tightly closed.

##### Incompatible substances or mixtures

Observe hints for combined storage.

##### Consideration of other advice:

##### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

#### Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

#### Human health values

##### Relevant DNELs and other threshold levels

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	35,3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

##### Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
(-)-Menthol	2216-51-5	DNEL	132 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
(-)-Menthol	2216-51-5	DNEL	10 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
(-)-Menthol	2216-51-5	DNEL	10 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
(-)-Menthol	2216-51-5	DNEL	19 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
(-)-Menthone	14073-97-3	DNEL	26,1 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
(-)-Menthone	14073-97-3	DNEL	7,4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Eucalyptol	470-82-6	DNEL	7,05 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Eucalyptol	470-82-6	DNEL	2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
L(-)-Limonene	5989-54-8	DNEL	33,3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
L(-)-Limonene	5989-54-8	DNEL	222 µg/cm <sup>2</sup>	human, dermal	worker (industry)	acute - local effects
β-Pinene	127-91-3	DNEL	5,69 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
β-Pinene	127-91-3	DNEL	0,8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
β-Pinene	127-91-3	DNEL	54 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Relevant DNELs of components						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DL- $\alpha$ -Pinene	80-56-8	DNEL	3,8 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
DL- $\alpha$ -Pinene	80-56-8	DNEL	0,542 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
(-)-Menthol	2216-51-5	PNEC	15,6 $\mu$ g/l	aquatic organisms	freshwater	short-term (single instance)
(-)-Menthol	2216-51-5	PNEC	1,56 $\mu$ g/l	aquatic organisms	marine water	short-term (single instance)
(-)-Menthol	2216-51-5	PNEC	2,37 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
(-)-Menthol	2216-51-5	PNEC	289 $\mu$ g/kg	aquatic organisms	freshwater sediment	short-term (single instance)
(-)-Menthol	2216-51-5	PNEC	28,9 $\mu$ g/kg	aquatic organisms	marine sediment	short-term (single instance)
(-)-Menthol	2216-51-5	PNEC	48,4 $\mu$ g/kg	terrestrial organisms	soil	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	0,031 mg/l	aquatic organisms	freshwater	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	0,003 mg/l	aquatic organisms	marine water	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	0,558 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	0,056 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
(-)-Menthone	14073-97-3	PNEC	0,093 mg/kg	terrestrial organisms	soil	short-term (single instance)
Eucalyptol	470-82-6	PNEC	57 $\mu$ g/l	aquatic organisms	freshwater	short-term (single instance)
Eucalyptol	470-82-6	PNEC	5,7 $\mu$ g/l	aquatic organisms	marine water	short-term (single instance)
Eucalyptol	470-82-6	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Eucalyptol	470-82-6	PNEC	1,425 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Eucalyptol	470-82-6	PNEC	0,142 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Eucalyptol	470-82-6	PNEC	0,25 mg/kg	terrestrial organisms	soil	short-term (single instance)

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
L-(-)-Limonene	5989-54-8	PNEC	5,4 µg/l	aquatic organisms	freshwater	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,54 µg/l	aquatic organisms	marine water	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	1,322 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,132 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,262 mg/kg	terrestrial organisms	soil	short-term (single instance)
β-Pinene	127-91-3	PNEC	1,004 µg/l	aquatic organisms	freshwater	short-term (single instance)
β-Pinene	127-91-3	PNEC	0,1 µg/l	aquatic organisms	marine water	short-term (single instance)
β-Pinene	127-91-3	PNEC	3,26 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
β-Pinene	127-91-3	PNEC	0,337 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
β-Pinene	127-91-3	PNEC	0,034 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
β-Pinene	127-91-3	PNEC	0,067 mg/kg	terrestrial organisms	soil	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	0,606 µg/l	aquatic organisms	freshwater	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	0,061 µg/l	aquatic organisms	marine water	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	0,2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	157 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	15,7 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
DL-α-Pinene	80-56-8	PNEC	31,7 µg/kg	terrestrial organisms	soil	short-term (single instance)

## 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

#### Eye/face protection





# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Use safety goggle with side protection.

### Skin protection



#### • hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

NBR (Nitrile rubber)

#### • material thickness

>0,11 mm

#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### • other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

### Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

### Environmental exposure controls

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless - yellow
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	92 °C (ECHA)
Flammability	this material is combustible, but will not ignite readily

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**

Lower and upper explosion limit	not determined
Flash point	72 °C (ECHA)
Auto-ignition temperature	280 °C at 1.020 hPa (ECHA)
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	7,71 mm <sup>2</sup> /s at 20 °C
Dynamic viscosity	6,947 cP at 20 °C
<u>Solubility(ies)</u>	
Water solubility	3,5 g/l at 20 °C (ECHA)
<u>Partition coefficient</u>	
Partition coefficient n-octanol/water (log value):	2,73 – 6,99 (ECHA)
Vapour pressure	43,8 Pa at 25 °C
<u>Density and/or relative density</u>	
Density	0,901 g/cm <sup>3</sup> at 20 °C (ECHA)
Relative vapour density	Information on this property is not available.
Particle characteristics	not relevant (liquid)
<u>Other safety parameters</u>	
Oxidising properties	none
<b>9.2 Other information</b>	
Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics:	
Refractive index	1,46 (20 °C)

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### If heated

Vapours may form explosive mixtures with air.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### 10.3 Possibility of hazardous reactions

**Violent reaction with:** strong oxidiser

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification acc. to GHS

#### Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	2.650 mg/kg	rat		ECHA
dermal	LD50	>5.000 mg/kg	rabbit		ECHA

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
(-)-Menthol	2216-51-5	oral	LD50	3.300 mg/kg	rat
(-)-Menthol	2216-51-5	dermal	LD50	>5.000 mg/kg	rabbit
(-)-Menthol	2216-51-5	inhalation: dust/mist	LC50	5.289 mg/m <sup>3</sup> / 4h	rat
(-)-Menthone	14073-97-3	oral	LD50	>2.000 mg/kg	rat
Eucalyptol	470-82-6	oral	LD50	2.480 mg/kg	rat
β-Pinene	127-91-3	oral	LD50	4.700 mg/kg	rat
DL-α-Pinene	80-56-8	dermal	LD50	>2.000 mg/kg	rat
DL-α-Pinene	80-56-8	oral	LD50	3.700 mg/kg	rat

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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

#### • If swallowed

Data are not available.

#### • If in eyes

Causes serious eye irritation

#### • If inhaled

Data are not available.

#### • If on skin

causes skin irritation, May produce an allergic reaction, pruritis, localised redness

#### • Other information

none

### 11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 11.3 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	3,4 mg/l	fish	ECHA	96 h
EC50	2,7 mg/l	aquatic invertebrates	ECHA	48 h

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
(-)-Menthol	2216-51-5	LC50	15,6 mg/l	fish	96 h
(-)-Menthol	2216-51-5	EC50	26,6 mg/l	aquatic invertebrates	48 h
(-)-Menthol	2216-51-5	ErC50	21,4 mg/l	algae	72 h
(-)-Menthone	14073-97-3	LC50	>28 mg/l	fish	96 h
(-)-Menthone	14073-97-3	EC50	30,6 mg/l	aquatic invertebrates	48 h
(-)-Menthone	14073-97-3	ErC50	58 mg/l	algae	72 h
Eucalyptol	470-82-6	LC50	57 mg/l	fish	96 h
Eucalyptol	470-82-6	EC50	>100 mg/l	aquatic invertebrates	48 h
Eucalyptol	470-82-6	ErC50	>74 mg/l	algae	72 h
$\beta$ -Pinene	127-91-3	LC50	0,68 mg/l	rainbow trout ( <i>Oncorhynchus mykiss</i> )	96 h
$\beta$ -Pinene	127-91-3	EC50	1,09 mg/l	daphnia magna	48 h
$\beta$ -Pinene	127-91-3	ErC50	0,7 mg/l	<i>Pseudokirchneriella subcapitata</i>	72 h
DL- $\alpha$ -Pinene	80-56-8	LC50	0,303 mg/l	fish	96 h
DL- $\alpha$ -Pinene	80-56-8	EC50	0,475 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Eucalyptol	470-82-6	EC50	>100 mg/l	microorganisms	3 h
$\beta$ -Pinene	127-91-3	EC50	326 mg/l	microorganisms	3 h

## 12.2 Persistence and degradability

### Biodegradation

The substance is readily biodegradable.

Degradability of components						
Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
(-)-Menthol	2216-51-5	oxygen depletion	64 %	7 d		ECHA
Eucalyptol	470-82-6	carbon dioxide generation	82 %	28 d		ECHA
L(-)-Limonene	5989-54-8	oxygen depletion	85 %	28 d		ECHA
$\beta$ -Pinene	127-91-3	oxygen depletion	76 %	28 d		ECHA

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Degradability of components						
Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
DL- $\alpha$ -Pinene	80-56-8	oxygen depletion	68 %	28 d		ECHA

### 12.3 Bioaccumulative potential

The substance fulfils the very bioaccumulative criterion.

n-octanol/water (log KOW)	2,73 – 6,99 (ECHA)
---------------------------	--------------------

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
(-)-Menthol	2216-51-5	$\geq 0,5 - \leq 15$	3,15 (25 °C)	
(-)-Menthone	14073-97-3		3,05 (25 °C)	
Eucalyptol	470-82-6		3,4	
L(-)-Limonene	5989-54-8	864,8	4,38 (pH value: 7,2, 37 °C)	
DL- $\alpha$ -Pinene	80-56-8		4,83	

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

**HP 4** irritant - skin irritation and eye damage

**HP 13** sensitising

**HP 14** ecotoxic

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADRRID	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

### 14.2 UN proper shipping name

ADRRID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name	Peppermint oil

### 14.3 Transport hazard class(es)

ADRRID	9
IMDG-Code	9
ICAO-TI	9

### 14.4 Packing group

ADRRID	III
IMDG-Code	III
ICAO-TI	III

### 14.5 Environmental hazards

hazardous to the aquatic environment

### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

### 14.8 Information for each of the UN Model Regulations

# Safety data sheet



acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063



### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) Additional information

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Particulars in the transport document	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Peppermint oil), 9, III, (-)
Classification code	M6
Danger label(s)	9, "Fish and tree"
 	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90
<b>Emergency Action Code</b>	<b>3Z</b>

### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) Additional information

<b>Classification code</b>	M6
<b>Danger label(s)</b>	9, "Fish and tree"
 	
<b>Environmental hazards</b>	Yes Hazardous to water
<b>Special provisions (SP)</b>	274, 335, 375, 601
<b>Excepted quantities (EQ)</b>	E1
<b>Limited quantities (LQ)</b>	5 L
<b>Transport category (TC)</b>	3
<b>Hazard identification No</b>	90

### International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Particulars in the shipper's declaration	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Peppermint oil), 9, III
Marine pollutant	yes (hazardous to the aquatic environment), (Peppermint oil)
Danger label(s)	9, "Fish and tree"
 	



# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)




## Peppermint oil pure, Italian

article number: **7063**

Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, liquid, n.o.s., (Peppermint oil), 9, III
Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, "Fish and tree"
	
Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

## SECTION 15: Regulatory information

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

#### Relevant provisions of the European Union (EU)

##### Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
E2	environmental hazards (hazardous to the aquatic environment, cat. 2)	200                      500	57)

##### Notation

57) Hazardous to the Aquatic Environment in category Chronic 2

##### Deco-Paint Directive

VOC content	100 %
VOC content	901 g/l

##### Industrial Emissions Directive (IED)

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**

VOC content	100 %
VOC content	901 g/l

### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

### Water Framework Directive (WFD)

not listed

### Regulation on the marketing and use of explosives precursors

not listed

### Regulation on drug precursors

not listed

### Regulation on substances that deplete the ozone layer (ODS)

not listed

### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

### Regulation on persistent organic pollutants (POP)

not listed

### National regulations(GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

#### Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Peppermint oil	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

### National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Country	Inventory	Status
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

### Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$ .	yes
14.8		Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	yes
14.8		Particulars in the transport document: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Peppermint oil), 9, III, (-)	yes

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.8		Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information	yes
14.8		Classification code: M6	yes
14.8		Danger label(s): 9, "Fish and tree"	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Environmental hazards: Yes Hazardous to water	yes
14.8		Special provisions (SP): 274, 335, 375, 601	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 5 L	yes
14.8		Transport category (TC): 3	yes
14.8		Hazard identification No: 90	yes
14.8		Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	yes
14.8		Particulars in the shipper's declaration: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Peppermint oil), 9, III	yes
14.8		Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.	yes
14.8		Particulars in the shipper's declaration: UN3082, Environmentally hazardous substance, liquid, n.o.s., (Peppermint oil), 9, III	yes
14.8	Special provisions (SP): A97, A158, A197	Special provisions (SP): A97, A158, A197, A215	yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1	VOC content: 100 % 901 9/1	VOC content: 100 %	yes
15.1		VOC content: 901 9/1	yes

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: 7063

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
15.1		Regulation on persistent organic pollutants (POP): not listed	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	yes
15.1		National inventories: change in the listing (table)	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association

# Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Peppermint oil pure, Italian

article number: **7063**

Abbr.	Descriptions of used abbreviations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.