according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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### Oil of origanum , natural

article number: 6612 Version: 3.0 en Replaces version of: 22.04.2022 Version: (2)

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

**Product identifier** 1.1

Identification of the substance

Article number

Registration number (REACH)

EC number

CAS number

Alternative name(s)

Oil of origanum, natural

6612

It is not required to list the identified uses because the substance is not subject to registration according to REACH (< 1 t/a).

281-670-3

84012-24-8

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. 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 Website: www.carlroth.de

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

### e-mail (competent person):

sicherheit@carlroth.de

#### 1.4 **Emergency telephone number**

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.1D	Acute toxicity (dermal)	4	Acute Tox. 4	H312
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315

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Section	Hazard class		Hazard class and category	Hazard statement
3.45	Skin sensitisation	1	Skin Sens. 1	H317
3.10	Aspiration hazard	1	Asp. Tox. 1	H304
4.1C	Hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

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 according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS07, GHS08



### **Hazard statements**

H302+H312 H304	Harmful if swallowed or in contact with skin May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects

#### **Precautionary statements**

#### **Precautionary statements - prevention**

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

### **Precautionary statements - response**

P302+P352	IF ON SKIN: Wash with plenty of soap and water
P312	Call a POISON CENTRE/doctor if you feel unwell
P332+P313	If skin irritation occurs: Get medical advice/attention

#### Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)



H304 H317 H412	May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.
P280 P302+P352	Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of soap and water.

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### 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  $\ge 0,1\%$ .

### **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

"UVCB substance" (substance of unknown or variable composition).

Name of substance	Oil of origanum
CAS No	84012-24-8
EC No	281-670-3

### Impurities/additives/constituents:

Name of substance	Identifier	Wt%
Carvacrol	CAS No 499-75-2	5 - < 10
	EC No 207-889-6	
y-Terpinene	CAS No 99-85-4	5 - < 10
	EC No 202-794-6	
p-Cymene	CAS No 99-87-6	5 - < 10
	EC No 202-796-7	
	Index No 601-094-00-1	
Myrcene	CAS No 123-35-3	1-<5
	EC No 204-622-5	
4-Terpinenol	CAS No 562-74-3	1-<5
	EC No 209-235-5	
β-Caryophyllene	CAS No 87-44-5	1-<5
	EC No 201-746-1	



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Identifier	Wt%
CAS No 99-86-5	1 - < 5
EC No 202-795-1	
Index No 601-095-00-7	
CAS No 78-70-6	<1
EC No 201-134-4	
Index No 603-235-00-2	
CAS No 80-56-8	<1
EC No 201-291-9	
	CAS No 99-86-5 EC No 202-795-1 Index No 601-095-00-7 CAS No 78-70-6 EC No 201-134-4 Index No 603-235-00-2 CAS No 80-56-8 EC No

Substance, Specific Conc. Limits, M-factors, ATE							
Specific Conc. Limits         M-Factors         ATE         Exposure route							
-	-	>300 <sup>mg</sup> / <sub>kg</sub> >1.000 <sup>mg</sup> / <sub>kg</sub>	oral dermal				

#### Remarks

For full text of abbreviations: see SECTION 16

### **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

Rinse skin with water/shower. After contact with skin, wash immediately with plenty of water. In case of skin reactions, consult a physician. In case of skin irritation, consult a physician.

#### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### **Following ingestion**

Rinse mouth with water (only if the person is conscious). Call a physician immediately. Observe aspiration hazard if vomiting occurs.

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- **4.2 Most important symptoms and effects, both acute and delayed** Aspiration hazard, Vomiting, 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, 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 $_2$ ), 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.

### **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.



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### 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.

### 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

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.

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
y-Terpinene	99-85-4	DNEL	2,939 mg/ m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects
y-Terpinene	99-85-4	DNEL	0,833 mg/ kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
α-Terpinene	99-86-5	DNEL	2,939 mg/ m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects
α-Terpinene	99-86-5	DNEL	0,833 mg/ kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	2,8 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects

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Relevant DNELs of components							
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time	
Linalool	78-70-6	DNEL	16,5 mg/ m³	human, inhalat- ory	worker (industry)	acute - systemic effects	
Linalool	78-70-6	DNEL	2,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects	
Linalool	78-70-6	DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects	
DL-α-Pinene	80-56-8	DNEL	3,8 mg/m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects	
DL-α-Pinene	80-56-8	DNEL	0,542 mg/ kg bw/day	human, dermal	worker (industry)	chronic - systemic effects	

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure tin
y-Terpinene	99-85-4	PNEC	0,003 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (sing instance)
y-Terpinene	99-85-4	PNEC	0 <sup>mg</sup> /l	aquatic organ- isms	marine water	short-term (sing instance)
y-Terpinene	99-85-4	PNEC	10 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (sing instance)
y-Terpinene	99-85-4	PNEC	0,49 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (sing instance)
y-Terpinene	99-85-4	PNEC	0,049 <sup>mg</sup> / kg	aquatic organ- isms	marine sediment	short-term (sing instance)
y-Terpinene	99-85-4	PNEC	0,423 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (sing instance)
Linalool	78-70-6	PNEC	0,2 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (sing instance)
Linalool	78-70-6	PNEC	0,02 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (sing instance)
Linalool	78-70-6	PNEC	10 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (sing instance)
Linalool	78-70-6	PNEC	2,22 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (sing instance)
Linalool	78-70-6	PNEC	0,222 <sup>mg</sup> / kg	aquatic organ- isms	marine sediment	short-term (sing instance)
Linalool	78-70-6	PNEC	0,327 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (sing instance)
DL-α-Pinene	80-56-8	PNEC	0,606 <sup>µg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (sing instance)
DL-α-Pinene	80-56-8	PNEC	0,061 <sup>µg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (sing instance)
DL-a-Pinene	80-56-8	PNEC	0,2 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (sin instance)

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Relevant PNECs of components							
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time	
DL-α-Pinene	80-56-8	PNEC	157 <sup>µg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)	
DL-α-Pinene	80-56-8	PNEC	15,7 <sup>µg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)	
DL-a-Pinene	80-56-8	PNEC	31,7 <sup>µg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)	

### 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

### Eye/face protection



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 consider-able 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

>0,3 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**



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Respiratory protection necessary at: Aerosol or mist formation.

### **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	clear - yellow - red brown
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	76 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	
Water solubility	not determined
Water solubility	hot determined
Partition coefficient	
Partition coefficient n-octanol/water (log value):	this information is not available
Vapour pressure	not determined
Density and/or relative density	
Density	0,915 <sup>g</sup> / <sub>cm³</sub> at 20 °C
•	
Relative vapour density	Information on this property is not available.
Particle characteristics	not relevant (liquid)
Other safety parameters	
Oxidising properties	none
Other information	
Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant



9.2

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Other safety characteristics:

**Refractive index** 

1,5 - 1,52 (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.

### **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 hazard classes as defined in Regulation (EC) No 1272/2008

Classification according to GHS (1272/2008/EC, CLP)

### Acute toxicity

Harmful if swallowed. Harmful in contact with skin.

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
p-Cymene	99-87-6	oral	LD50	4.750 <sup>mg</sup> / <sub>kg</sub>	rat
p-Cymene	99-87-6	dermal	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rabbit
Carvacrol	499-75-2	oral	LD50	810 <sup>mg</sup> / <sub>kg</sub>	rat
y-Terpinene	99-85-4	oral	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
y-Terpinene	99-85-4	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
β-Caryophyllene	87-44-5	oral	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	mouse
Myrcene	123-35-3	oral	LD50	>3.380 <sup>mg</sup> / <sub>kg</sub>	mouse
Myrcene	123-35-3	dermal	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rabbit
4-Terpinenol	562-74-3	oral	LD50	1.300 <sup>mg</sup> / <sub>kg</sub>	rat

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Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
4-Terpinenol	562-74-3	dermal	LD50	>2.500 - <5.00 0 <sup>mg</sup> / <sub>kg</sub>	rabbit
a-Terpinene	99-86-5	oral	LD50	1.680 <sup>mg</sup> / <sub>kg</sub>	rat
a-Terpinene	99-86-5	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
Linalool	78-70-6	oral	LD50	2.790 <sup>mg</sup> / <sub>kg</sub>	rat
Linalool	78-70-6	dermal	LD50	5.610 <sup>mg</sup> / <sub>kg</sub>	rabbit
DL-a-Pinene	80-56-8	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
DL-a-Pinene	80-56-8	oral	LD50	3.700 <sup>mg</sup> / <sub>kg</sub>	rat

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

### Respiratory or skin sensitisation

May cause an allergic skin reaction.

### 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**

May be fatal if swallowed and enters airways.

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

#### • If swallowed

vomiting, aspiration hazard

#### • If in eyes

Data are not available.

#### • If inhaled

vertigo, nausea, headache

### • If on skin

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

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### • Other information

none

- **11.2** Endocrine disrupting properties Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .
- **11.3** Information on other hazards

There is no additional information.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
p-Cymene	99-87-6	LC50	48 <sup>mg</sup> / <sub>l</sub>	fish	96 h
p-Cymene	99-87-6	EC50	3,7 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h
p-Cymene	99-87-6	ErC50	4,03 <sup>mg</sup> / <sub>l</sub>	algae	72 h
Carvacrol	499-75-2	LC50	6,17 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Carvacrol	499-75-2	EC50	6,06 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h
Carvacrol	499-75-2	ErC50	4,05 <sup>mg</sup> / <sub>l</sub>	algae	72 h
y-Terpinene	99-85-4	EC50	2,792 <sup>mg</sup> / <sub>l</sub>	fish	96 h
β-Caryophyllene	87-44-5	EC50	>0,17 <sup>mg</sup> / <sub>l</sub>	daphnia magna	48 h
β-Caryophyllene	87-44-5	ErC50	>0,033 <sup>mg</sup> / <sub>l</sub>	algae	72 h
Myrcene	123-35-3	EC50	1,47 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h
Myrcene	123-35-3	EC50	0,31 <sup>mg</sup> / <sub>l</sub>	algae	72 h
Myrcene	123-35-3	ErC50	0,342 <sup>mg</sup> / <sub>l</sub>	algae	72 h
α-Terpinene	99-86-5	LC50	3.150 <sup>µg</sup> / <sub>l</sub>	fish	96 h
α-Terpinene	99-86-5	EC50	1,7 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h
Linalool	78-70-6	LC50	27,8 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Linalool	78-70-6	EC50	59 <sup>mg</sup> /l	aquatic invertebrates	48 h
Linalool	78-70-6	ErC50	156,7 <sup>mg</sup> / <sub>l</sub>	algae	96 h
DL-a-Pinene	80-56-8	LC50	0,303 <sup>mg</sup> /l	fish	96 h
DL-α-Pinene	80-56-8	EC50	0,475 <sup>mg</sup> /ı	aquatic invertebrates	48 h

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Aquatic toxicity (chronic) of components						
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time	
Carvacrol	499-75-2	EC50	75,75 <sup>mg</sup> / <sub>l</sub>	microorganisms	3 h	
γ-Terpinene	99-85-4	EC50	>1.000 <sup>mg</sup> / <sub>l</sub>	microorganisms	3 h	
α-Terpinene	99-86-5	EC50	>10 <sup>mg</sup> / <sub>l</sub>	microorganisms	3 h	
Linalool	78-70-6	EC50	>100 <sup>mg</sup> / <sub>l</sub>	microorganisms	30 min	

### 12.2 Persistence and degradability

Degradability of components							
Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source	
p-Cymene	99-87-6	oxygen deple- tion	88 %	14 d		ECHA	
Carvacrol	499-75-2	oxygen deple- tion	18,1 %	28 d		ECHA	
y-Terpinene	99-85-4	oxygen deple- tion	27 %	28 d		ECHA	
β-Caryophyl- lene	87-44-5	oxygen deple- tion	10 %	28 d		ECHA	
Myrcene	123-35-3	oxygen deple- tion	76 %	28 d		ECHA	
α-Terpinene	99-86-5	oxygen deple- tion	30 %	14 d		ECHA	
Linalool	78-70-6	oxygen deple- tion	40,9 %	5 d		ECHA	
DL-α-Pinene	80-56-8	oxygen deple- tion	68 %	28 d		ECHA	

### 12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potentia	oaccumulative potential of components					
Name of substance	CAS No	BCF	Log KOW	BOD5/COD		
p-Cymene	99-87-6		4,8 (pH value: ~7, 20 °C)			
Carvacrol	499-75-2		3,33 (40 °C)			
y-Terpinene	99-85-4		5,4 (25 °C)			
β-Caryophyllene	87-44-5		6,23 (pH value: 7, 25 °C)			
Myrcene	123-35-3		4,82 (pH value: ~6,5, 30 °C)			
α-Terpinene	99-86-5		5,3 (35 °C)			
Linalool	78-70-6		2,9 (pH value: 7, 20 °C)			
DL-α-Pinene	80-56-8		4,83			

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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### 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  $\ge 0,1\%$ .

#### 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

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 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 5 specific target organ toxicity (STOT)/aspiration toxicity
- HP6 acute toxicity
- 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
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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- Special precautions for user 14.6 There is no additional information.
- Maritime transport in bulk according to IMO instruments 14.7 The cargo is not intended to be carried in bulk.
- 14.8 Information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

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

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

**Restrictions according to REACH, Annex XVII** 

angerous substances with restrictions (REACH, Annex XVII)						
Name of substance	Name acc. to inventory	CAS No	Restriction	No		
Oil of origanum	this product meets the criteria for classification in accordance with Reg- ulation No 1272/2008/EC		R3	3		
Oil of origanum	substances in tattoo inks and perman- ent make-up		R75	75		

Legend R3

1. 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 lokes.

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they

a can be used as fuel in decorative oil lamps for supply to the general public, and
present an aspiration hazard and are labelled with H304.
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation

5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';
(c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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#### Legend R75

1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such sub-stances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:

(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight; (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by

weight;

(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser cat-egory 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive cat-egory 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than: (i) 0,1 % by weight, if the substance is used solely as a pH regulator

(ií) 0,01 % by weight, in all other cases;

(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (\*1), the substance is present in the

(f) in the case of a substance insteam and the first and 0,00005 % by weight; (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:

(ii) "Rinse-off products";
(ii) "Not to be used in products applied on mucous membranes";
(iii) "Not to be used in eye products";

(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column; (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration. (n) In the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the strictest in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.

A. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of the paragraph 1 or substance then paragraph 1 or substance to paragraph 1 or substance then paragraph 1 or substance to paragraph 1 or su plication of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, para-graph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification. 6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes affect after the date referred to in paragraph 1 or as the case may be paragraph 4 of this entry.

amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made. 7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information: (a) the statement "Mixture for use in tattoos or permanent make-up"; (b) a reference number to uniquely identify the barch:

(a) the statement "Mixture for use in tattoos or permanent make-up";
(b) a reference number to uniquely identify the batch;
(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
(d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;

tion limit specified in Appendix 13

(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below

the concentration limit specified in Appendix 13; (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible. The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise. Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph. 8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for

tattooing purposes.

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

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9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

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

Not listed.

#### **Seveso Directive**

2012/18/EU (Seveso III)							
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes				
	not assigned						

#### **Deco-Paint Directive**

VOC content	100 %
VOC content	915 <sup>g</sup> / <sub>l</sub>

#### **Industrial Emissions Directive (IED)**

VOC content	100 %
VOC content	915 <sup>g</sup> / <sub>l</sub>

## 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



according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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### 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
NZ	NZIoC	substance is listed
TW	TCSI	substance is listed
VN	NCI	substance is listed

#### Legend

AIIC	Australian Inventory of Industrial Chemicals
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
TCSI	Taiwan Chemical Substance Inventory

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance. According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

### **SECTION 16: Other information**

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

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.8	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional in- formation: Not subject to ADR, RID and ADN.		yes
15.1	VOC content: 100 % 915 <sup>g</sup> / <sub>l</sub>	VOC content: 100 %	yes
15.1		VOC content: 915 <sup>g</sup> / <sub>l</sub>	yes
15.1		National inventories: change in the listing (table)	yes

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.2	Chemical Safety Assessment: No Chemical Safety Assessment has been car- ried out for this substance.	Chemical safety assessment: No Chemical Safety Assessment has been car- ried out for this substance. According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or compon- ents of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
ATE Acute Toxicity Estimate		
BCF	Bioconcentration factor	
BOD	Biochemical Oxygen Demand	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	
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 identi fier 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	
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	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
IMDG	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 specified time interval	
log KOW	n-Octanol/water	

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Abbr.	Descriptions of used abbreviations	
NLP	No-Longer Polymer	
РВТ	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
SVHC	Substance of Very High Concern	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). 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
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful 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.