

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: **3355**  
Version: **1.0 en**

date of compilation: 2021-04-15

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

#### 1.1 Product identifier

Identification of the substance	<b>Oil of clary-sage</b> natural natural
Article number	3355
Registration number (REACH)	C, It is not required to list the identified uses because the substance is not subject to registration according to REACH (< 1 t/a).
EC number	283-911-8
CAS number	84775-83-7

#### 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 products which come into contact with foodstuffs. Do not use for private purposes (household).

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

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

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	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

Warning

#### Pictograms

GHS07



#### Hazard statements

H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H319 Causes serious eye irritation  
H412 Harmful to aquatic life with long lasting effects

#### Precautionary statements

##### Precautionary statements - prevention

P280 Wear protective gloves/eye protection

##### Precautionary statements - response

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

##### Hazardous ingredients for labelling:

Linalool, DL- $\alpha$ -Pinene,  $\beta$ -Caryophyllene, D-(+)-Limonene, Geranyl acetate, Geraniol, Nerol, Terpinolene,  $\beta$ -Pinene

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

Signal word: **Warning**

Symbol(s)



H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.  
P280 Wear protective gloves/eye protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

contains: Linalool, DL- $\alpha$ -Pinene,  $\beta$ -Caryophyllene, D-(+)-Limonene, Geranyl acetate, Geraniol, Nerol, Terpinolene,  $\beta$ -Pinene

### 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.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Name of substance Oil of clary-sage  
REACH Reg. No C  
CAS No 84775-83-7  
EC No 283-911-8

Impurities and additives, classification acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Acetic acid linalyl ester	CAS No 115-95-7 EC No 204-116-4	50 – 70	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412	
Linalool	CAS No 78-70-6 EC No 201-134-4 Index No 603-235-00-2	10 – 19	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317	
Geranyl acetate	CAS No 105-87-3 EC No 203-341-5	< 1	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Aquatic Chronic 2 / H411	 
Geraniol	CAS No 106-24-1 EC No 203-377-1	< 1	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317	 
Nerol	CAS No 106-25-2 EC No 203-378-7	< 1	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317	 
Myrcene	CAS No 123-35-3 EC No 204-622-5	< 1	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	   

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Impurities and additives, classification acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
$\beta$ -Pinene	CAS No 18172-67-3  EC No 204-872-5	< 1	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1B / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
Terpinolene	CAS No 586-62-9  EC No 209-578-0	< 1	Skin Sens. 1B / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
D-(+)-Limonene	CAS No 5989-27-5  EC No 227-813-5  Index No 601-029-00-7	< 1	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
Camphene	CAS No 79-92-5  EC No 201-234-8	< 1	Flam. Sol. 1 / H228 Eye Irrit. 2 / H319 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
DL- $\alpha$ -Pinene	CAS No 80-56-8  EC No 201-291-9	< 1	Flam. Liq. 3 / H226 Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Skin Sens. 1A / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
$\beta$ -Caryophyllene	CAS No 87-44-5  EC No 201-746-1	< 1	Skin Sens. 1 / H317 Asp. Tox. 1 / H304	

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.

#### Following skin contact

In case of skin reactions, consult a physician. In case of skin irritation, consult a physician.

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### 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

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<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.

## SECTION 6: Accidental release measures

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



#### For non-emergency personnel

Wearing of 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. 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.

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### 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.

#### 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)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
GB	cycloalkanes (>C7)	80-56-8	WEL		800						EH40/2005

#### Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)  
TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Acetic acid linalyl ester	115-95-7	DNEL	2,75 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Acetic acid linalyl ester	115-95-7	DNEL	2,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Acetic acid linalyl ester	115-95-7	DNEL	8.000 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects
Acetic acid linalyl ester	115-95-7	DNEL	8.000 µg/cm <sup>2</sup>	human, dermal	worker (industry)	acute - local effects
Linalool	78-70-6	DNEL	2,8 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	16,5 mg/m <sup>3</sup>	human, inhalatory	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
Geranyl acetate	105-87-3	DNEL	62,59 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Geranyl acetate	105-87-3	DNEL	35,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
D-(+)-Limonene	5989-27-5	DNEL	66,7 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
D-(+)-Limonene	5989-27-5	DNEL	9,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Geraniol	106-24-1	DNEL	161,6 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Geraniol	106-24-1	DNEL	12,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Geraniol	106-24-1	DNEL	11.800 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects
Nerol	106-25-2	DNEL	4,4 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Nerol	106-25-2	DNEL	1,25 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
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
$\beta$ -Pinene	18172-67-3	DNEL	5,69 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
β-Pinene	18172-67-3	DNEL	0,8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
β-Pinene	18172-67-3	DNEL	54 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects
Camphene	79-92-5	DNEL	110,2 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Camphene	79-92-5	DNEL	110,2 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
Camphene	79-92-5	DNEL	0,21 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Camphene	79-92-5	DNEL	1,25 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Acetic acid linalyl ester	115-95-7	PNEC	0,011 mg/l	aquatic organisms	freshwater	short-term (single instance)
Acetic acid linalyl ester	115-95-7	PNEC	0,001 mg/l	aquatic organisms	marine water	short-term (single instance)
Acetic acid linalyl ester	115-95-7	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Acetic acid linalyl ester	115-95-7	PNEC	0,609 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Acetic acid linalyl ester	115-95-7	PNEC	0,061 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Acetic acid linalyl ester	115-95-7	PNEC	0,115 mg/kg	terrestrial organisms	soil	short-term (single instance)
Linalool	78-70-6	PNEC	0,2 mg/l	aquatic organisms	freshwater	short-term (single instance)
Linalool	78-70-6	PNEC	0,02 mg/l	aquatic organisms	marine water	short-term (single instance)
Linalool	78-70-6	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Linalool	78-70-6	PNEC	2,22 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Linalool	78-70-6	PNEC	0,222 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Linalool	78-70-6	PNEC	0,327 mg/kg	terrestrial organisms	soil	short-term (single instance)
Geranyl acetate	105-87-3	PNEC	3,72 µg/l	aquatic organisms	freshwater	short-term (single instance)
Geranyl acetate	105-87-3	PNEC	0,372 µg/l	aquatic organisms	marine water	short-term (single instance)



# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Geranyl acetate	105-87-3	PNEC	8 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Geranyl acetate	105-87-3	PNEC	0,442 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Geranyl acetate	105-87-3	PNEC	0,044 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Geranyl acetate	105-87-3	PNEC	0,086 mg/kg	terrestrial organisms	soil	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	14 µg/l	aquatic organisms	freshwater	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	1,4 µg/l	aquatic organisms	marine water	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	1,8 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	3,85 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	0,385 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
D-(+)-Limonene	5989-27-5	PNEC	0,763 mg/kg	terrestrial organisms	soil	short-term (single instance)
Geraniol	106-24-1	PNEC	0,011 mg/l	aquatic organisms	freshwater	short-term (single instance)
Geraniol	106-24-1	PNEC	0,001 mg/l	aquatic organisms	marine water	short-term (single instance)
Geraniol	106-24-1	PNEC	0,7 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Geraniol	106-24-1	PNEC	0,115 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Geraniol	106-24-1	PNEC	0,011 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Geraniol	106-24-1	PNEC	0,017 mg/kg	terrestrial organisms	soil	short-term (single instance)
Nerol	106-25-2	PNEC	7,45 µg/l	aquatic organisms	freshwater	short-term (single instance)
Nerol	106-25-2	PNEC	0,745 µg/l	aquatic organisms	marine water	short-term (single instance)
Nerol	106-25-2	PNEC	12,9 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Nerol	106-25-2	PNEC	133 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Nerol	106-25-2	PNEC	13,3 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
Nerol	106-25-2	PNEC	22,3 µg/kg	terrestrial organisms	soil	short-term (single instance)

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Relevant PNECs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
DL- $\alpha$ -Pinene	80-56-8	PNEC	0,606 $\mu\text{g}/\text{l}$	aquatic organisms	freshwater	short-term (single instance)
DL- $\alpha$ -Pinene	80-56-8	PNEC	0,061 $\mu\text{g}/\text{l}$	aquatic organisms	marine water	short-term (single instance)
DL- $\alpha$ -Pinene	80-56-8	PNEC	0,2 $\text{mg}/\text{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
DL- $\alpha$ -Pinene	80-56-8	PNEC	157 $\mu\text{g}/\text{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
DL- $\alpha$ -Pinene	80-56-8	PNEC	15,7 $\mu\text{g}/\text{kg}$	aquatic organisms	marine sediment	short-term (single instance)
DL- $\alpha$ -Pinene	80-56-8	PNEC	31,7 $\mu\text{g}/\text{kg}$	terrestrial organisms	soil	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	1,004 $\mu\text{g}/\text{l}$	aquatic organisms	freshwater	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	0,1 $\mu\text{g}/\text{l}$	aquatic organisms	marine water	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	3,26 $\text{mg}/\text{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	0,337 $\text{mg}/\text{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	0,034 $\text{mg}/\text{kg}$	aquatic organisms	marine sediment	short-term (single instance)
$\beta$ -Pinene	18172-67-3	PNEC	0,067 $\text{mg}/\text{kg}$	terrestrial organisms	soil	short-term (single instance)
Camphene	79-92-5	PNEC	0,001 $\text{mg}/\text{l}$	aquatic organisms	freshwater	short-term (single instance)
Camphene	79-92-5	PNEC	0 $\text{mg}/\text{l}$	aquatic organisms	marine water	short-term (single instance)
Camphene	79-92-5	PNEC	10 $\text{mg}/\text{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Camphene	79-92-5	PNEC	0,026 $\text{mg}/\text{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
Camphene	79-92-5	PNEC	0,003 $\text{mg}/\text{kg}$	aquatic organisms	marine sediment	short-term (single instance)
Camphene	79-92-5	PNEC	0,021 $\text{mg}/\text{kg}$	terrestrial organisms	soil	short-term (single instance)

## 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

#### Eye/face protection



# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

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

Butyl caoutchouc (butyl rubber)

#### • material thickness

0,7mm

#### • 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
Form	-
Colour	light yellow
Odour	characteristic
Melting point/freezing point	<-20 °C (ECHA)
Boiling point or initial boiling point and boiling range	189,2 °C at 101,3 kPa (ECHA)

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: **3355**

Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	0,7 vol% - 5,2 vol%
Flash point	84,5 °C at 101.325 Pa (ECHA)
Auto-ignition temperature	260 °C at 100.105 Pa (ECHA)
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined

### Solubility(ies)

Water solubility not determined

### Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure <1 hPa at 20 °C

Density 0,897 g/cm<sup>3</sup> at 20 °C

Particle characteristics No data available.

### Other safety parameters

Oxidising properties none

## 9.2 Other information

Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics:

Surface tension 54,15 mN/m (19,9 °C) (ECHA)

Refractive index 1,455 - 1,465

Temperature class (EU, acc. to ATEX) T3  
Maximum permissible surface temperature on the equipment: 200°C

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### 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

Shall not be classified as acutely toxic.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	5.600 mg/kg	rat		ECHA

##### Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
DL- $\alpha$ -Pinene	80-56-8	oral	1.000 mg/kg

##### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Acetic acid linalyl ester	115-95-7	oral	LD50	>9.000 mg/kg	rat
Acetic acid linalyl ester	115-95-7	dermal	LD50	>5.000 mg/kg	rabbit
Linalool	78-70-6	oral	LD50	2.790 mg/kg	rat
Linalool	78-70-6	dermal	LD50	5.610 mg/kg	rabbit
Myrcene	123-35-3	oral	LD50	>3.380 mg/kg	mouse

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Myrcene	123-35-3	dermal	LD50	>5.000 mg/kg	rabbit
Geranyl acetate	105-87-3	oral	LD50	6.330 mg/kg	rat
$\beta$ -Caryophyllene	87-44-5	oral	LD50	>5.000 mg/kg	mouse
D-(+)-Limonene	5989-27-5	oral	LD50	>2.000 mg/kg	rat
Geraniol	106-24-1	oral	LD50	3.600 mg/kg	rat
Geraniol	106-24-1	dermal	LD50	>5.000 mg/kg	rabbit
Nerol	106-25-2	oral	LD50	4.500 mg/kg	rat
Nerol	106-25-2	dermal	LD50	>5.000 mg/kg	rabbit
Terpinolene	586-62-9	oral	LD50	>2.000 mg/kg	rat
Terpinolene	586-62-9	dermal	LD50	>2.000 mg/kg	rat
DL- $\alpha$ -Pinene	80-56-8	dermal	LD50	>2.000 mg/kg	rat
DL- $\alpha$ -Pinene	80-56-8	oral	LD50	3.700 mg/kg	rat
$\beta$ -Pinene	18172-67-3	oral	LD50	4.700 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.

### 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

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

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

Not listed.

## 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.

Aquatic toxicity (acute)			
Endpoint	Value	Species	Exposure time
EL50	14 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Acetic acid linalyl ester	115-95-7	LC50	11 mg/l	fish	96 h
Acetic acid linalyl ester	115-95-7	EC50	15 mg/l	aquatic invertebrates	48 h
Acetic acid linalyl ester	115-95-7	ErC50	62 mg/l	algae	72 h
Linalool	78-70-6	LC50	27,8 mg/l	fish	96 h
Linalool	78-70-6	EC50	59 mg/l	aquatic invertebrates	48 h
Linalool	78-70-6	ErC50	156,7 mg/l	algae	96 h
Myrcene	123-35-3	EC50	1,47 mg/l	aquatic invertebrates	48 h
Myrcene	123-35-3	EC50	0,31 mg/l	algae	72 h
Myrcene	123-35-3	ErC50	0,342 mg/l	algae	72 h
Geranyl acetate	105-87-3	LC50	68,12 mg/l	fish	96 h
Geranyl acetate	105-87-3	EC50	14,1 mg/l	aquatic invertebrates	48 h
Geranyl acetate	105-87-3	ErC50	3,72 mg/l	algae	72 h
$\beta$ -Caryophyllene	87-44-5	EC50	>0,17 mg/l	daphnia magna	48 h

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
$\beta$ -Caryophyllene	87-44-5	ErC50	>0,033 mg/l	algae	72 h
D-(+)-Limonene	5989-27-5	LC50	0,46 mg/l	fish	96 h
D-(+)-Limonene	5989-27-5	EC50	0,307 mg/l	aquatic invertebrates	48 h
D-(+)-Limonene	5989-27-5	ErC50	0,32 mg/l	algae	72 h
Geraniol	106-24-1	LC50	22 mg/l	fish	96 h
Geraniol	106-24-1	EC50	10,8 mg/l	aquatic invertebrates	48 h
Geraniol	106-24-1	ErC50	13,1 mg/l	algae	72 h
Nerol	106-25-2	LC50	20,3 mg/l	fish	96 h
Nerol	106-25-2	EC50	32,4 mg/l	aquatic invertebrates	48 h
Nerol	106-25-2	ErC50	9,54 mg/l	algae	72 h
Terpinolene	586-62-9	LC50	0,805 mg/l	fish	96 h
Terpinolene	586-62-9	EC50	0,634 mg/l	aquatic invertebrates	48 h
Terpinolene	586-62-9	ErC50	0,692 mg/l	algae	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
$\beta$ -Pinene	18172-67-3	LC50	0,68 mg/l	rainbow trout ( <i>Oncorhynchus mykiss</i> )	96 h
$\beta$ -Pinene	18172-67-3	EC50	1,09 mg/l	daphnia magna	48 h
$\beta$ -Pinene	18172-67-3	ErC50	0,7 mg/l	<i>Pseudokirchneriella subcapitata</i>	72 h
Camphene	79-92-5	LC50	0,72 mg/l	fish	96 h
Camphene	79-92-5	EC50	0,72 mg/l	aquatic invertebrates	48 h
Camphene	79-92-5	ErC50	>1.000 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Acetic acid linalyl ester	115-95-7	LC50	11,14 mg/l	fish	20 h
Linalool	78-70-6	EC50	>100 mg/l	microorganisms	30 min
D-(+)-Limonene	5989-27-5	EC50	<0,67 mg/l	fish	8 d
D-(+)-Limonene	5989-27-5	EC50	188 $\mu$ g/l	aquatic invertebrates	21 d
Geraniol	106-24-1	EC50	70 mg/l	microorganisms	30 min
Nerol	106-25-2	EC50	241 mg/l	microorganisms	3 h
Terpinolene	586-62-9	EC50	69 mg/l	microorganisms	3 h



# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
$\beta$ -Pinene	18172-67-3	EC50	326 mg/l	microorganisms	3 h
Camphene	79-92-5	EC50	>1.000 mg/l	microorganisms	3 h

### Biodegradation

Data are not available.

## 12.2 Process of degradability

### Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
Linalool	78-70-6	oxygen depletion	40,9 %	5 d		ECHA
Myrcene	123-35-3	oxygen depletion	76 %	28 d		ECHA
Geranyl acetate	105-87-3	oxygen depletion	>70 %	28 d		ECHA
$\beta$ -Caryophyllene	87-44-5	oxygen depletion	10 %	28 d		ECHA
D-(+)-Limonene	5989-27-5	carbon dioxide generation	58,8 %	14 d		ECHA
D-(+)-Limonene	5989-27-5	oxygen depletion	80 %	28 d		ECHA
Geraniol	106-24-1	DOC removal	90 - 100 %	3 d		ECHA
Nerol	106-25-2	oxygen depletion	90 %	28 d		ECHA
Terpinolene	586-62-9	oxygen depletion	81 %	28 d		ECHA
DL- $\alpha$ -Pinene	80-56-8	oxygen depletion	68 %	28 d		ECHA
$\beta$ -Pinene	18172-67-3	oxygen depletion	76 %	28 d		ECHA

## 12.3 Bioaccumulative potential

Data are not available.

### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Acetic acid linalyl ester	115-95-7	173,9	3,9 (25 °C)	
Linalool	78-70-6		2,9 (pH value: 7, 20 °C)	
Myrcene	123-35-3		4,82 (pH value: ~6,5, 30 °C)	
Geranyl acetate	105-87-3		4,04	
$\beta$ -Caryophyllene	87-44-5		6,23 (pH value: 7, 25 °C)	

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
D-(+)-Limonene	5989-27-5		4,38 (pH value: 7,2, 37 °C)	
Geraniol	106-24-1		2,6 (25 °C)	
Nerol	106-25-2		2,76 (pH value: ~6,5, 30 °C)	
Terpinolene	586-62-9		4,47	
DL- $\alpha$ -Pinene	80-56-8		4,83	
$\beta$ -Pinene	18172-67-3		4,425 (25 °C)	
Camphene	79-92-5		4,22 (pH value: 7,2, 37 °C)	

#### 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

Not listed.

#### 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.

### 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. Waste catalogue ordinance (Germany).

### 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.

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### SECTION 14: Transport information

- 14.1 UN number or ID number** not subject to transport regulations
- 14.2 UN proper shipping name** not assigned
- 14.3 Transport hazard class(es)** none
- 14.4 Packing group** not assigned
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
There is no additional information.
- 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

##### Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

not assigned

##### 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

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

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

##### Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)				
Name of substance	Name acc. to inventory	CAS No	Restriction	No
Oil of clary-sage	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		R3	3
Myrcene	flammable / pyrophoric		R40	40
$\beta$ -Pinene	flammable / pyrophoric		R40	40
D-(+)-Limonene	flammable / pyrophoric		R40	40
Camphene	flammable / pyrophoric		R40	40
DL- $\alpha$ -Pinene	flammable / pyrophoric		R40	40

##### 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 jokes,
    - 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:

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### Legend

- can be used as fuel in decorative oil lamps for supply to the general public, and,
  - present an aspiration hazard and are labelled with R65 or 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 (CEN).
  - 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
    - (a) lamp oils, labelled with R65 or 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 R65 or 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 may lead to life threatening lung damage';
    - (c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
  - 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.
  - 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.
- R40
- 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
    - metallic glitter intended mainly for decoration,
    - artificial snow and frost,
    - 'whoopee' cushions,
    - silly string aerosols,
    - imitation excrement,
    - horns for parties,
    - decorative flakes and foams,
    - artificial cobwebs,
    - stink bombs.
  - 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:  
'For professional users only'.
  - 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
  - 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

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

Not listed.

### 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
	not assigned		

### Deco-Paint Directive (2004/42/EC)

VOC content	99,1 % 888,9 g/l
-------------	---------------------

### Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	96,4 %
VOC content	864,7 g/l

### Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

not listed

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

### Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

### Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Myrcene	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		A)	
Linalool	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		A)	

#### Legend

A) Indicative list of the main pollutants

### Regulation 98/2013/EU on the marketing and use of explosives precursors

not listed

### Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

not listed

### Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)

not listed

### Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)

not listed

### National inventories

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	not all ingredients are listed

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Country	Inventory	Status
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

### Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
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
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
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

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
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)
Ceiling-C	Ceiling value
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

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: 3355

Abbr.	Descriptions of used abbreviations
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)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
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
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
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 a specified time interval
log KOW	n-Octanol/water
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
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)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit

# Safety data sheet

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



## Oil of clary-sage natural natural

article number: **3355**

Abbr.	Descriptions of used abbreviations
SVHC	Substance of Very High Concern
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### 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.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). 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 chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
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.