

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: **3291**

Version: **4.0 en**

Replaces version of: 2023-02-03

Version: (3)

date of compilation: 2021-08-30

Revision: 2024-09-21

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

### 1.1 Product identifier

Identification of the substance **Oil of cedar leaf , artificial**  
Article number 3291  
Alternative name(s) Oleum Foliorum cedri

### 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). Food, drink and animal feeding-stuffs.

### 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 sheet: Department Health, Safety and Environment

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

### 1.4 Emergency telephone number

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

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.6	Flammable liquid	3	Flam. Liq. 3	H226
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
3.4S	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	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

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

The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

## 2.2 Label elements

### Labelling

#### Signal word

Danger

#### Pictograms

GHS02, GHS07,  
GHS08, GHS09



### Hazard statements

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

### Precautionary statements

#### Precautionary statements - prevention

P210	Keep away from heat. No smoking
P273	Avoid release to the environment

#### Precautionary statements - response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
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
P331	Do NOT induce vomiting

#### Hazardous ingredients for labelling:

DL- $\alpha$ -Pinene, (-)- $\alpha$ -Thujone,  $\alpha$ -Terpinene, L(-)-Limonene, Myrcene,  $\beta$ -Pinene

## 2.3 Other hazards

### Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

### Endocrine disrupting properties

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

# Safety data sheet Safety data sheet

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



Oil of cedar leaf , artificial

article number: 3291

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

not relevant (mixture)

### 3.2 Mixtures

#### Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
(-)- $\alpha$ -Thujone	CAS No 546-80-5  EC No 208-912-2	10 – < 25	Acute Tox. 4 / H302		
Fenchone	CAS No 1195-79-5  EC No 214-804-6	10 – < 25	Flam. Liq. 3 / H226		
Myrcene	CAS No 123-35-3  EC No 204-622-5	1 – < 5	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	   	
Sabinene	CAS No 3387-41-5  EC No 222-212-4	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	 	
4-Terpinenol	CAS No 562-74-3  EC No 209-235-5	1 – < 5	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335		
L-(-)-Limonene	CAS No 5989-54-8  EC No 227-815-6  Index No 601-029-00-7	1 – < 5	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	  	C GHS-HC
Camphene	CAS No 79-92-5  EC No 201-234-8	1 – < 5	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 – < 5	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	   	
$\alpha$ -Terpinene	CAS No 99-86-5  EC No	1 – < 5	Flam. Liq. 3 / H226 Acute Tox. 4 / H302 Skin Sens. 1 / H317 Asp. Tox. 1 / H304	 	GHS-HC

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
	202-795-1 Index No 601-095-00-7		Aquatic Chronic 2 / H411		
(+)-Camphor	CAS No 464-49-3  EC No 207-355-2	1 - < 3	Flam. Sol. 2 / H228 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 2 / H371		
γ-Terpinene	CAS No 99-85-4  EC No 202-794-6	1 - < 3	Flam. Liq. 3 / H226 Repr. 2 / H361fd Aquatic Chronic 2 / H411		
p-Cymene	CAS No 99-87-6  EC No 202-796-7  Index No 601-094-00-1	1 - < 3	Flam. Liq. 3 / H226 Acute Tox. 3 / H331 Repr. 2 / H361f Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411		GHS-HC
β-Pinene	CAS No 127-91-3  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		

### Notes

C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.  
GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
(-)-α-Thujone	CAS No 546-80-5  EC No 208-912-2	-	-	500 mg/kg	oral
DL-α-Pinene	CAS No 80-56-8  EC No 201-291-9	-	-	1.000 mg/kg	oral
4-Terpinenol	CAS No 562-74-3  EC No 209-235-5	-	-	1.300 mg/kg	oral
α-Terpinene	CAS No 99-86-5  EC No 202-795-1	-	-	1.680 mg/kg	oral
Sabinene	CAS No	-	-	301 mg/kg	oral

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Name of sub-stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
	3387-41-5 EC No 222-212-4				
p-Cymene	CAS No 99-87-6  EC No 202-796-7	-	-	3 mg/l/4h	inhalation: va- pour
(+)-Camphor	CAS No 464-49-3  EC No 207-355-2	-	-	4,5 mg/l/4h	inhalation: dust/mist

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

#### Following eye contact

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

#### Following ingestion

Call a physician immediately. Observe aspiration hazard if vomiting occurs.

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

Aspiration hazard, Gastrointestinal complaints, Vomiting, Nausea, 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!

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

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. Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 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

Do not breathe vapour/spray. Avoid contact with skin and eyes. Avoidance of ignition sources. Provide adequate ventilation.

### 6.2 Environmental precautions

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

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

#### Advice on how to contain a spill

Covering of drains.

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

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

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provision of sufficient ventilation. When not in use, keep containers tightly closed.

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



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

### Measures to protect the environment

Avoid release to the environment.

### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

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

Store in a well-ventilated place. Keep container tightly closed.

### Incompatible substances or mixtures

Observe hints for combined storage. Incompatible materials: see section 10. Keep/store away from oxidizing substances.

### Consideration of other advice:

Ground/bond container and receiving equipment.

### Ventilation requirements

Use local and general ventilation.

### 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	hydrocarbon mixture (RCP method)		WEL		800		1.600				EH40/2005
GB	cycloalkanes, >C7	80-56-8	WEL		800						EH40/2005

#### Notation

Ceiling-C  
STEL

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

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DL- $\alpha$ -Pinene	80-56-8	DNEL	3,8 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
DL- $\alpha$ -Pinene	80-56-8	DNEL	0,542 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
L-(-)-Limonene	5989-54-8	DNEL	33,3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Relevant DNELs of components						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
L-(-)-Limonene	5989-54-8	DNEL	222 µg/cm <sup>2</sup>	human, dermal	worker (industry)	acute - local effects
γ-Terpinene	99-85-4	DNEL	2,939 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
γ-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, inhalatory	worker (industry)	chronic - systemic effects
α-Terpinene	99-86-5	DNEL	0,833 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic 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
(+)-Camphor	464-49-3	DNEL	17,63 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
(+)-Camphor	464-49-3	DNEL	10 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
β-Pinene	127-91-3	DNEL	5,69 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
β-Pinene	127-91-3	DNEL	0,8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
β-Pinene	127-91-3	DNEL	54 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects

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

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organisms	Environmental compartment	Exposure time
				isms		instance)
L-(-)-Limonene	5989-54-8	PNEC	0,54 µg/l	aquatic organisms	marine water	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	1,322 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,132 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
L-(-)-Limonene	5989-54-8	PNEC	0,262 mg/kg	terrestrial organisms	soil	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	0,003 mg/l	aquatic organisms	freshwater	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	0,49 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	0,049 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
γ-Terpinene	99-85-4	PNEC	0,423 mg/kg	terrestrial organisms	soil	short-term (single instance)
Camphene	79-92-5	PNEC	0,001 mg/l	aquatic organisms	freshwater	short-term (single instance)
Camphene	79-92-5	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
Camphene	79-92-5	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Camphene	79-92-5	PNEC	0,026 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Camphene	79-92-5	PNEC	0,003 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Camphene	79-92-5	PNEC	0,021 mg/kg	terrestrial organisms	soil	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	1,71 µg/l	aquatic organisms	freshwater	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	0,171 µg/l	aquatic organisms	marine water	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	1 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	0,139 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	0,017 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
(+)-Camphor	464-49-3	PNEC	0,013 mg/kg	terrestrial organisms	soil	short-term (single instance)
β-Pinene	127-91-3	PNEC	1,004 µg/l	aquatic organisms	freshwater	short-term (single instance)

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
$\beta$ -Pinene	127-91-3	PNEC	0,1 $\mu\text{g}/\text{l}$	aquatic organisms	marine water	short-term (single instance)
$\beta$ -Pinene	127-91-3	PNEC	3,26 $\text{mg}/\text{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
$\beta$ -Pinene	127-91-3	PNEC	0,337 $\text{mg}/\text{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
$\beta$ -Pinene	127-91-3	PNEC	0,034 $\text{mg}/\text{kg}$	aquatic organisms	marine sediment	short-term (single instance)
$\beta$ -Pinene	127-91-3	PNEC	0,067 $\text{mg}/\text{kg}$	terrestrial organisms	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 considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

NBR (Nitrile rubber)

#### • material thickness

0,4 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



# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: **3291**

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

### Environmental exposure controls

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	yellowish brown
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	not determined
Flash point	51 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined

#### Solubility(ies)

Water solubility (practically insoluble)

#### Partition coefficient

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

Vapour pressure not determined

#### Density and/or relative density

Density 0,9 g/cm<sup>3</sup> at 20 °C

Relative vapour density Information on this property is not available.

Particle characteristics not relevant (liquid)

#### Other safety parameters

Oxidising properties none

### 9.2 Other information

Information with regard to physical hazard classes: There is no additional information.

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Other safety characteristics:

There is no additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition.

#### If heated

Risk of ignition. 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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

#### Acute toxicity

Harmful if swallowed.

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
(-)- $\alpha$ -Thujone	546-80-5	oral	500 mg/kg
DL- $\alpha$ -Pinene	80-56-8	oral	1.000 mg/kg
4-Terpinenol	562-74-3	oral	1.300 mg/kg
$\alpha$ -Terpinene	99-86-5	oral	1.680 mg/kg
Sabinene	3387-41-5	oral	301 mg/kg
p-Cymene	99-87-6	inhalation: vapour	3 mg/l/4h
(+)-Camphor	464-49-3	inhalation: dust/mist	4,5 mg/l/4h

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
(-)- $\alpha$ -Thujone	546-80-5	oral	LD50	500 mg/kg	rat

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Myrcene	123-35-3	oral	LD50	>3.380 mg/kg	mouse
Myrcene	123-35-3	dermal	LD50	>5.000 mg/kg	rabbit
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
4-Terpinenol	562-74-3	oral	LD50	1.300 mg/kg	rat
4-Terpinenol	562-74-3	dermal	LD50	>2.500 - < 5.000 mg/kg	rabbit
$\gamma$ -Terpinene	99-85-4	oral	LD50	>2.000 mg/kg	rat
$\gamma$ -Terpinene	99-85-4	dermal	LD50	>2.000 mg/kg	rat
$\alpha$ -Terpinene	99-86-5	oral	LD50	1.680 mg/kg	rat
$\alpha$ -Terpinene	99-86-5	dermal	LD50	>2.000 mg/kg	rat
Sabinene	3387-41-5	oral	LD50	301 - 2.000 mg/kg	rat
p-Cymene	99-87-6	oral	LD50	4.750 mg/kg	rat
p-Cymene	99-87-6	dermal	LD50	>5.000 mg/kg	rabbit
(+)-Camphor	464-49-3	oral	LD50	1.310 mg/kg	mouse
(+)-Camphor	464-49-3	dermal	LD50	>2.000 mg/kg	rat
$\beta$ -Pinene	127-91-3	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

May be fatal if swallowed and enters airways.

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

#### • If swallowed

nausea, gastrointestinal complaints, vomiting, aspiration hazard

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

- **If in eyes**

Causes serious eye irritation

- **If inhaled**

Data are not available.

- **If on skin**

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

- **Other information**

none

### 11.2 Endocrine disrupting properties

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

### 11.3 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
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
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
$\gamma$ -Terpinene	99-85-4	EC50	2,792 mg/l	fish	96 h
$\alpha$ -Terpinene	99-86-5	LC50	3.150 $\mu$ g/l	fish	96 h
$\alpha$ -Terpinene	99-86-5	EC50	1,7 mg/l	aquatic invertebrates	48 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
Sabinene	3387-41-5	EC50	3.960 mg/l	aquatic invertebrates	48 h
p-Cymene	99-87-6	LC50	48 mg/l	fish	96 h
p-Cymene	99-87-6	EC50	3,7 mg/l	aquatic invertebrates	48 h
p-Cymene	99-87-6	ErC50	4,03 mg/l	algae	72 h
(+)-Camphor	464-49-3	LC50	33,25 mg/l	fish	96 h
(+)-Camphor	464-49-3	EC50	4,23 mg/l	aquatic invertebrates	48 h
(+)-Camphor	464-49-3	ErC50	1,71 mg/l	algae	72 h
$\beta$ -Pinene	127-91-3	LC50	0,68 mg/l	rainbow trout (Oncorhynchus mykiss)	96 h
$\beta$ -Pinene	127-91-3	EC50	1,09 mg/l	daphnia magna	48 h
$\beta$ -Pinene	127-91-3	ErC50	0,7 mg/l	Pseudokirchneriella subcapitata	72 h

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

### Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
NOEC	1 mg/l	(top) predators		d

### Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Myrcene	123-35-3	NOEC	0,1 mg/l	Tetrahymena pyriformis	d
DL- $\alpha$ -Pinene	80-56-8	NOEC	2 mg/l	microorganisms	28 d
$\gamma$ -Terpinene	99-85-4	EC50	>1.000 mg/l	microorganisms	3 h
$\alpha$ -Terpinene	99-86-5	EC50	>10 mg/l	microorganisms	3 h
Camphene	79-92-5	EC50	>1.000 mg/l	microorganisms	3 h
p-Cymene	99-87-6	NOEC	100 mg/l	microorganisms	28 d
(+)-Camphor	464-49-3	EC50	>100 mg/l	microorganisms	3 h
$\beta$ -Pinene	127-91-3	EC50	326 mg/l	microorganisms	3 h

## 12.2 Persistence and degradability

3,022 mg/mg

### Biodegradation

Not readily biodegradable.

### Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
Myrcene	123-35-3	oxygen depletion	76 %	28 d		ECHA
DL- $\alpha$ -Pinene	80-56-8	oxygen depletion	68 %	28 d		ECHA
L-(-)-Limonene	5989-54-8	oxygen depletion	85 %	28 d		ECHA
$\gamma$ -Terpinene	99-85-4	oxygen depletion	27 %	28 d		ECHA
$\alpha$ -Terpinene	99-86-5	oxygen depletion	30 %	14 d		ECHA
Sabinene	3387-41-5	oxygen depletion	36 %	28 d		ECHA
p-Cymene	99-87-6	oxygen depletion	88 %	14 d		ECHA
$\beta$ -Pinene	127-91-3	oxygen depletion	76 %	28 d		ECHA

## 12.3 Bioaccumulative potential

Data are not available.

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Fenchone	1195-79-5		3,52	
Myrcene	123-35-3		4,82 (pH value: ~6,5, 30 °C)	
DL- $\alpha$ -Pinene	80-56-8		4,83	
L-(-)-Limonene	5989-54-8	864,8	4,38 (pH value: 7,2, 37 °C)	
$\gamma$ -Terpinene	99-85-4		5,4 (25 °C)	
$\alpha$ -Terpinene	99-86-5		5,3 (35 °C)	
Camphene	79-92-5		4,22 (pH value: 7,2, 37 °C)	
p-Cymene	99-87-6		4,8 (pH value: ~7, 20 °C)	
(+)-Camphor	464-49-3		2,3 (20 °C)	

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

### 12.6 Endocrine disrupting properties

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

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



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

#### Sewage disposal-relevant information

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

#### Waste treatment of containers/packagings

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

### 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 3** flammable
- HP 5** specific target organ toxicity (STOT)/aspiration toxicity
- HP 6** acute toxicity
- HP 10** toxic for reproduction
- HP 14** ecotoxic

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

### 13.3 Remarks

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

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADRRID	UN 1993
IMDG-Code	UN 1993
ICAO-TI	UN 1993

### 14.2 UN proper shipping name

ADRRID	FLAMMABLE LIQUID, N.O.S.
IMDG-Code	FLAMMABLE LIQUID, N.O.S.
ICAO-TI	Flammable liquid, n.o.s.
Technical name (hazardous ingredients)	Fenchone, Camphene

### 14.3 Transport hazard class(es)

ADRRID	3
IMDG-Code	3
ICAO-TI	3

### 14.4 Packing group

ADRRID	III
IMDG-Code	III
ICAO-TI	III

### 14.5 Environmental hazards

	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment):	7-METHYL-3-METHYLEN-1,6-OCTADIENE

### 14.6 Special precautions for user

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

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

The cargo is not intended to be carried in bulk.

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

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

Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Particulars in the transport document	UN1993, FLAMMABLE LIQUID, N.O.S., (contains: Fenchone, Camphene), 3, III, (D/E), environmentally hazardous
Classification code	F1
Danger label(s)	3, "Fish and tree"

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291



Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	D/E
Hazard identification No	30
<b>Emergency Action Code</b>	3Y

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

<b>Classification code</b>	F1
<b>Danger label(s)</b>	3, "Fish and tree"



<b>Environmental hazards</b>	Yes Hazardous to water
<b>Special provisions (SP)</b>	274, 601
<b>Excepted quantities (EQ)</b>	E1
<b>Limited quantities (LQ)</b>	5 L
<b>Transport category (TC)</b>	3
<b>Hazard identification No</b>	30

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

Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Particulars in the shipper's declaration	UN1993, FLAMMABLE LIQUID, N.O.S., (contains: Fenchone, Camphene, 7-METHYL-3-METHYLEN-1,6-OCTADIENE), 3, III, 51°C c.c., MARINE POLLUTANT
Marine pollutant	yes (hazardous to the aquatic environment), (7-METHYL-3-METHYLEN-1,6-OCTADIENE)
<b>Danger label(s)</b>	3, "Fish and tree"



Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, <u>S-E</u>

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Stowage category A

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

Proper shipping name Flammable liquid, n.o.s.  
Particulars in the shipper's declaration UN1993, Flammable liquid, n.o.s., (contains: Fenchone, Camphene), 3, III  
Environmental hazards YES (hazardous to the aquatic environment)  
Danger label(s) 3



Special provisions (SP) A3  
Excepted quantities (EQ) E1  
Limited quantities (LQ) 10 L

## SECTION 15: Regulatory information

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

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

##### Seveso Directive

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

##### Notation

57) Hazardous to the Aquatic Environment in category Chronic 2

##### Deco-Paint Directive

VOC content	100 %
VOC content	900 g/l

##### Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	900 g/l

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

none of the ingredients are listed

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

none of the ingredients are listed

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

### 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)	
$\gamma$ -Terpinene	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)	
p-Cymene	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 on the marketing and use of explosives precursors

none of the ingredients are listed

#### Regulation on drug precursors

none of the ingredients are listed

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

none of the ingredients are listed

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

none of the ingredients are listed

#### Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

#### National regulations(GB)

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

none of the ingredients are listed

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

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Oil of cedar leaf	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
Fenchone	flammable / pyrophoric		40

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Myrcene	flammable / pyrophoric		40
$\beta$ -Pinene	flammable / pyrophoric		40
Sabinene	flammable / pyrophoric		40
(+)-Camphor	flammable / pyrophoric		40
L-(-)-Limonene	flammable / pyrophoric		40
Camphene	flammable / pyrophoric		40
DL- $\alpha$ -Pinene	flammable / pyrophoric		40
$\gamma$ -Terpinene	flammable / pyrophoric		40
$\alpha$ -Terpinene	flammable / pyrophoric		40
p-Cymene	flammable / pyrophoric		40

### 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	not all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
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	not all ingredients are listed
VN	NCI	all ingredients are listed

#### Legend

AIIC	Australian Inventory of Industrial Chemicals
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
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

### Legend

TCSI Taiwan Chemical Substance Inventory  
TSCA Toxic Substance Control Act

## 15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

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

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$ .	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$ .	yes
15.1	VOC content: 100 % 900 g/l	VOC content: 100 %	yes
15.1		VOC content: 900 g/l	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (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
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Abbr.	Descriptions of used abbreviations
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
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RCP	Reciprocal calculation procedure
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
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
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average

# Safety data sheet Safety data sheet

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



## Oil of cedar leaf , artificial

article number: 3291

Abbr.	Descriptions of used abbreviations
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

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

### Classification procedure

Physical and chemical properties. The classification is based on tested mixture.

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H371	May cause damage to organs.
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.

### Disclaimer

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