

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006  
Version 1.0 Revision Date 23.08.2014  
GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

### 1.1 Product identifiers

Product name : Oil of turpentine

Product Number : 221  
Brand : Zeus  
Index-No. : 650-002-00-6  
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.  
CAS-No. : 8006-64-2

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

Company : Zentrum für Energie- und Umweltstudien GmbH  
Siemensstraße 19  
I-39100 Bozen

Telephone : +49 0471068190  
Fax : +49 0471068191  
E-mail address : info@zeus-bz.it

### 1.4 Emergency telephone number

Emergency Phone # : +49 3019240 (Giftnotruf Universitätsmedizin Berlin)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

Flammable liquids (Category 3), H226  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 4), H312  
Skin irritation (Category 2), H315  
Eye irritation (Category 2), H319  
Skin sensitisation (Category 1), H317  
Aspiration hazard (Category 1), H304  
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn	Harmful	R10
Xi	Irritant	R20/21/22, R65 R36/38 R43
N	Dangerous for the environment	R51/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

## 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008



Pictogram

Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapour.

H302 + H312 + H332

Harmful if swallowed, in contact with skin or if inhaled

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 statement(s)

P273

Avoid release to the environment.

P280

Wear protective gloves/ protective clothing.

P301 + P310

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

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.

Supplemental Hazard Statements

none

## 2.3 Other hazards - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Fir oil Pine oil  
Turpentine  
Oil of turpentine

CAS-No. : 8006-64-2  
EC-No. : 232-350-7  
Index-No. : 650-002-00-6

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Turpentine oil</b>		
CAS-No.	8006-64-2	<= 100 %
EC-No.	232-350-7	
Index-No.	650-002-00-6	
		Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Chronic 2; H226, H302 + H312 + H332, H304, H315, H317, H319, H411

### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
<b>Turpentine oil</b>		
CAS-No.	8006-64-2	<= 100 %
EC-No.	232-350-7	
Index-No.	650-002-00-6	
		Xn, N, R10 - R20/21/22 - R36/38 - R43 - R51/53 - R65

#### **SECTION 4: First aid measures**

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

###### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

###### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

###### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

###### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

###### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

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#### **SECTION 5: Firefighting measures**

##### **5.1 Extinguishing media**

###### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Nature of decomposition products not known.

##### **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

##### **5.4 Further information**

Use water spray to cool unopened containers.

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#### **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

##### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

##### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

##### **6.4 Reference to other sections**

For disposal see section 13.

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#### **SECTION 7: Handling and storage**

##### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Components with workplace control parameters**

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                                 |                                    |
|---------------------------------|------------------------------------|
| a) Appearance                   | Form: liquid<br>Colour: colourless |
| b) Odour                        | pungent                            |
| c) Odour Threshold              | no data available                  |
| d) pH                           | no data available                  |
| e) Melting point/freezing point | Melting point/range: -55 °C - lit. |

f) Initial boiling point and boiling range	153 - 175 °C - lit.
g) Flash point	36 °C - closed cup
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 6 %(V) Lower explosion limit: 0,8 %(V)
k) Vapour pressure	5 hPa at 20 °C
l) Vapour density	no data available
m) Relative density	0,86 g/cm <sup>3</sup> at 25 °C
n) Water solubility	0,351 g/l at 20 °C
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	270 °C
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

## 9.2 Other safety information

Surface tension	54,8 mN/m at 21 °C
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available  
In the event of fire: see section 5

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 5.760 mg/kg

Inhalation: no data available

Dermal: no data available

**Skin corrosion/irritation**

Skin - rabbit

Result: Irritating to skin.

(Draize Test)

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

in vitro assay

S. typhimurium

Result: negative

**Carcinogenicity**

Carcinogenicity - mouse - Skin

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**Additional Information**

RTECS: YO8400000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Exposure to high airborne concentrations can cause anesthetic effects., Nausea, Dizziness, Headache

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**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish                      static test LC50 - Danio rerio (zebra fish) - 29 mg/l - 96 h  
(OECD Test Guideline 203)

Toxicity to daphnia and              static test EC50 - Daphnia magna (Water flea) - 6,4 mg/l - 48 h  
other aquatic                              (OECD Test Guideline 202)  
invertebrates

Toxicity to algae                      static test EC50 - Desmodesmus subspicatus (green algae) - 17,1 mg/l - 72 h  
(OECD Test Guideline 201)

**12.2 Persistence and degradability**

Biodegradability                      aerobic - Exposure time 28 d  
Result: 71,7 % - Readily biodegradable.  
(OECD Test Guideline 301F)  
Remarks: The 10 day time window criterion is not fulfilled.

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

Toxic to aquatic life with long lasting effects.

no data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 1299

IMDG: 1299

IATA: 1299

**14.2 UN proper shipping name**

ADR/RID: TURPENTINE

IMDG: TURPENTINE

IATA: Turpentine

**14.3 Transport hazard class(es)**

ADR/RID: 3

IMDG: 3

IATA: 3

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

**14.6 Special precautions for user**

no data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox.	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H226	Flammable liquid and vapour.

H302	Harmful if swallowed.
H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

**Full text of R-phrases referred to under sections 2 and 3**

N	Dangerous for the environment
Xn	Harmful
R10	Flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ZEUS and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.zeus-bz.it](http://www.zeus-bz.it) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.