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

· **Informations to product No. 29**

· **Product name:**

**Campher, racemischer**  
Camphora racemica, Camphora synthetica  
Racemic Camphor

· **Supplier of the Product / responsible Company:**

Caesar & Loretz GmbH  
Herderstr. 31  
40721 Hilden  
Tel.: 02103/4994-0  
Fax: 02103/32360  
e-mail: info@caelo.de

· **Emergency telephone:**

Giftinformationszentrum Mainz  
Langenbeckstr. 1, 55131 Mainz  
Tel.: 06131/19240

· **Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information available.

· **Application of the substance / mixture:**

Ingredient for pharmaceutical drugs or active pharmaceutical ingredient.

## 2 Hazards identification

· **GHS-Labeling Elements:**



· **Signal word:** Warning

· **H-Phrases:**

H228 Flammable solid.  
H332 Harmful if inhaled  
H371 May cause damage to organs


· **P-Phrases:**

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P309 IF exposed or you feel unwell:  
P311 Call a POISON CENTER or doctor/physician

**Flam. Sol. 2**

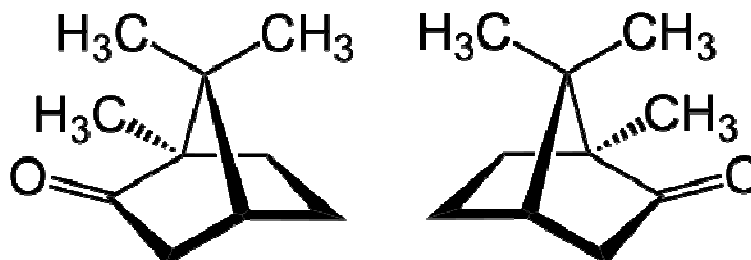
**Acute Tox. 4**

**STOT SE 2**

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### 3 Composition / information on ingredients

• **Chemical characterization:**



**CAS-No. Substance name**

76-22-2 Bornan-2-on, racemic

• **EINECS-No.:** 200-945-0

• **REACH Reg. No.:** 01-2119966156-31-0000

• **INCI-Name:** Camphor

### 4 First aid measures


- **after inhalation:** Fresh air or oxygen. Seek medical advice.
- **after skin contact:** Take off contaminated clothes and shoes, wash immediately with plenty of water and soap, if skin irritation continues, seek medical advice.
- **After eye contact:** Rinse out with plenty of water with the eyelid wide open. Call in ophthalmologist, even if no immediate symptoms occur.
- **after swallowing:** Call for medical help immediately.

### 5 Fire-fighting measures

- **Suitable extinguishing media:** All regular extinguishing media can be used. Select fire fighting measures suitable to surrounding environment.
- **Specific hazards during fire fighting:** Combustible. Dust explosion hazard. In case of fire dangerous vapours/gases can be generated: Smoke gases, explosive dust-/vapour-air-mixtures.
- **Special protective equipment for fire-fighters:** Suitable protective clothes and respiratory protection.
- **Additional information:** Prevent fire extinguishing water from contaminating surface water, the ground water system or soil. Residues must be deposited according to local regulations.

### 6 Accidental release measures

- **Personal protective measures:** Avoid contact with substance. Wear suitable protective equipment according to Chapter 8 of this MSDS. Assure appropriate ventilation.
- **Methods for cleaning:** Take up dry. Avoid generation of dusts. Disposal according to Chapter 13 of this MSDS. Clean up with water.
- **Additional information:** Do not empty into drains, prevent from contaminating surface water or the ground water system.

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## 7 Handling and storage

- **Handling:** Good ventilation of the working place. Avoid generation of dusts.
- **Informations to fire or explosion protection:** Good ventilation of the working place and storage place. Keep away from ignition sources. Do not smoke..
- **Storage:**
- **Requirements for storage areas and containers:**  
Tightly closed. Store at a dry place. At room temperature ( +15°C to +25°C ). Store at a good ventilated place..
- **Advices on common storage:** Not required.
- **Additional informations to storage conditions:** None.

## 8 Exposure controls / personal protective equipment

**Components with limit values that require monitoring at the workplace:**

76-22-2 Bornan-2-on

AGW: 2 ml/m<sup>3</sup> bzw. 13 mg/m<sup>3</sup> (TRGS 900)


- **Personal protective equipment:**
- **General protective and hygiene measures:** The usual precaution measures during handling of chemicals are to observe.
- **Respiratory protection:** Dust protection mask. Good ventilation of working place.
- **Hand protection:** Protection gloves of rubber or Neoprene for contact of not more than 15 minutes. Suitable protection glove material for enduring contact: Nitrile rubber penetration time > 480 min., thickness: 0,35 mm.
- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

- **Form:** solid
- **Colour:** colourless - white
- **Odour:** characteristic
- **Melting point / melting range:** 175 - 177 °C
- **Boiling point / boiling range:** 204 °C (1013 hPa)
- **Flash point:** 65 °C
- **Ignition temperature:** 460 °C
- **Explosion limits:**
- **lower:** 0,6 Vol %
- **upper:** 3,5 Vol %
- **Vapour pressure:** (25 °C) 0,87 hPa; (70 °C) 5 hPa
- **Density:** (20 °C) 0,992 g/cm<sup>3</sup>
- **Solubility in / Miscibility with**
- **Water:** ca. 1 g/l

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:**  
No decomposition during appropriate use.
- **Materials to avoid:** Strong oxidants, strong acids and bases.

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- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** None.

## 11 Toxicological information

- **Acute toxicity:**  
**LD/LD50-data relevant for hazard classification:**  
76-22-2 Bornan-2-on, racemic camphor  
Oral: LD50: 5000 mg/kg (rat)  
Oral: LD50: 1310 mg/kg (mus)
- **Primary irritant effect:**
  - **on skin:** irritant effect.
  - **on eyes:** irritant effect.
  - **on respiratory organs:** irritant effect.
- **Sensitization:** No sensitization reported.

## 12 Ecological information


- **Ecotoxicological effects:**  
Fish toxicity: LC50 - Danio rerio. 36 mg/l / 96 h (determined with D-Camphor), Pimephales promelas: 110 mg/l / 96 h (determined with DL-Camphor)
- **General advices:** Do not empty into drains, prevent from contaminating surface water or the ground water system.
- **Log pOW:** 2,38
- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

## 13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to local regulations as pharmaceutical waste.
- **Empty contaminated packaging:**
- **Recommendation:** Disposal according to the local regulations.

## 14 Transport informations

- **Land transport according to ADR:**
- **Proper shipping name:** Camphor
- **Class:** 4.1
- **UN-number:** 2717
- **Packing group:** III
- **Classification code:** F1
- **Limited quantities:** 5kg
- **Hazard classification number:** 40
- **Special provisions (Chapter 3.3 ADR):** -
- **Additional informations for sea transport IMDG:**
- **EMS-No.:** F-A, S-I
- **Properties:** Fp=65°C

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## 15 Regulatory information

• **Kennzeichnung Global harmonisierte System zur Classification und Kennzeichnung von Chemikalien (GHS, Globally Harmonized System of Classification and Labelling of Chemicals):**

The product is classified and labelled according to GHS-regulations.

• **Hazard symbols:** GHS02, GHS07, GHS08

• **Signal word:** Warning

• **H-Phrases:**

H228 Flammable solid.

H332 Harmful if inhaled

H371 May cause damage to organs

• **P-Phrases:**

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P309 IF exposed or you feel unwell:

P311 Call a POISON CENTER or doctor/physician

• **National regulations (Germany):**

• **Water hazard class:** see chapter 12

• **Storage class TRGS 510:** 4.1C

## 16 Other Information

The information provided in this MSDS is correct to the best of our knowledge at the date of edition.

• **Reason for last revision:** Adjustment to regulation (EC) 1907/2006 (REACH) and GHS-labelling system.