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

· **Informations to product No. 2487**

· **Product name:**

**Estradiolbenzoat, API (mikrobielle Herkunft)**  
Estradioli benzoas

· **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:** Danger

· **H-Phrases:**

H360 May damage fertility or the unborn child

H351 Suspected of causing cancer

H372 Causes damage to organs through prolonged or repeated exposure

· **P-Phrases:**

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapours/spray.


P281 Use personal protective equipment as required

P308+P313 IF exposed or concerned: Get medical advice/attention.

**Repr. 1B**

**Carc. 2**

**STOT RE 1**

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### 3 Composition / information on ingredients

**CAS-No. Substance name**

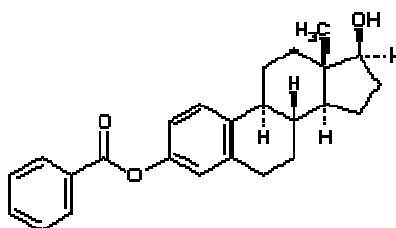
50-50-0 Estradiol benzoate

• **EINECS-No.:** 200-043-7

• **REACH Reg. No.:** (pre-registered)

• **INCI-Name:** -

• **Chemical characterization:**



**Estra-1,3,5(10)-triene-3,17 $\beta$ -diol 3-benzoate**

### 4 First aid measures


- **after inhalation:** Fresh. If feeling unwell continuously seek medical advice.
- **after skin contact:** Take off contaminated clothes and shoes, wash immediately with plenty of water and soap.
- **after eye contact:** Rinse out with plenty of water with the eyelid wide open. AugenSeek medical advice.
- **after swallowing:** Drink water. Induce vomiting. Seek medical advice.

### 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 but not flammable. In case of fire dangerous gases / vapours can be released: Smoke gases.
- **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 dust formation and contact with substance.
- **Environmental protective measures:** Prevent from entering into drains.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.

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## 7 Handling and storage

- **Handling:** No special requirements.
- **Storage:**
- **Requirements for storage areas and containers:**  
Tightly closed. Store at a dry place. At room temperature ( +15°C to +25°C ).
- **Advices on common storage:**  
TRGS 514 "Storage of toxic and very toxic substances ..."
- **Additional informations to storage conditions:** Keep container tightly closed.

## 8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **General protective and hygiene measures:**  
Wash hands before breaks and after work.  
Avoid contact with eyes and skin.
- **Respiratory protection:** Dust protection mask
- **Hand protection:** Protection gloves.
- **Eye protection:** Safety glasses.

## 9 Physical and chemical properties


- **Form:** solid
- **Colour:** white
- **Odour:** odourless
- **Melting point / melting range:** 191 - 198 °C (Decomposition)
- **Boiling point / boiling range:** not determined
- **Flash point:** not determined
- **Density:** not determined
- **Solubility in / Miscibility with**
- **Water:** nearly not soluble

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:**  
No decomposition during appropriate use.  
Thermal decomposition: Above 147 °C  
Decomposition energy: 128kJ/kg
- **Hazardous reactions:** The fine powder may cause dust explosion
- **Dangerous products of decomposition:** Carbon monoxide and carbon dioxide
- **Additional information:** The following applies to flammable organic substances and preparations: in correspondingly fine distribution, when whirled generally be assumed a dust explosion potential.

## 11 Toxicological information

- **Acute Toxicity**  
LD50 (oral, mause): >4000mg/kg

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LD50 (oral, rat): >4000mg/kg

• **Primary irritation:**

• **on skin:** no data available

• **on eyes:** no data available

• **Sensitization:** none sensitizing known

• **Carcinogenity** All steroid hormones can stimulate the growth of hormone-dependent tissues and tumors.

• **Reproduction toxicity:**

TDL <sub>0</sub>	0,002 mg/kg (mouse) (Female (Subcutaneous) 8 d. after conception)
	0,2 mg/kg (rat) (Male (Parenteral) 1 d. premating)
	1,12 mg/kg (dog) (male (Parenteral) 16 w. premating)
	10 mg/kg (rat) (Female (Implant) 24 d. premating)
TDL <sub>0</sub> / Intramuscular	0,084 mg/kg (Monkey) (Female (14 d. premating))
	0,366 mg/kg (Female) (Pig ( 15-25 d. after conception))
	3,333 mg/kg (Female) (Pig (8-11 w. after conception))
TD <sub>low</sub>	0,005-0,025 mg/kg (rat) (Female (Subcutaneous) 1 d. after conception)
	1 mg/kg (Female) (Intramuscular [5 d. premating])
	2,5 mg/kg (-) (Female rat (Intramuscular) 13 d. after conception)
	3,75 mg/kg (Male) (rat (Intramuscular) 15 d. premating)
TD (low)	0,0015 mg/kg (rat) (Female [3 d. premating])
	1,063 mg/kg (rat) (Female [21 d. postbirth])
TDL <sub>0</sub>	0,008 mg/kg (mouse) (Female (3-4 d. after conception))

## 12 Ecological information

• **Ecotoxicical effects:**

EC<sub>50</sub> (Daphnia magna): >100mg/l

EC<sub>50</sub>(Algae): >100mg/l

• **Additional information:** Prevent from entering into environmental waters, waste water or soil!

• **log Pow:** 5,93

• **Water hazard class:** WGK 2 (Self classification): 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:**

Not classified as dangerous in the meaning of transport regulations.

## 15 Regulatory information

• **Labelling according to actual legislation (GHS, Globally Harmonized System of Classification and Labelling of Chemicals):**

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

• **Hazard symbols:** GHS08

• **Signal word:** Danger

• **H-Phrases:**

H360 May damage fertility or the unborn child

H351 Suspected of causing cancer

H372 Causes damage to organs through prolonged or repeated exposure

• **P-Phrases:**

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P281 Use personal protective equipment as required

P308+P313 IF exposed or concerned: Get medical advice/attention.

• **National regulations (Germany):**

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

• **Storage class TRGS 510:** 6.1C

## 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.