

# Safety Data Sheet

Revision Date Jan-1-2024

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## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifier

Product name: Estradiol

Catalog No.: S1709

CAS No.: 50-28-2

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

Identified uses : Laboratory chemicals, manufacture of substances.

### 1.3 Details of the supplier of the safety data sheet

Company: Selleck Chemicals

TollFree: +1 877 796-6397

Tel: +1 832 582-8158

Fax: +1 832 582-8590

### 1.4 Emergency telephone number

Emergency phone #: +1 832 582-8158

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H350 #May cause cancer.

H351 #Suspected of causing cancer.

H360 #May damage fertility or the unborn child.

H362 #May cause harm to breast-fed children.

H372 #Causes damage to organs through prolonged or repeated exposure.

H400 #Very toxic to aquatic life.

H410 #Very toxic to aquatic life with long lasting effects.

### 2.2 GHS Label elements, including precautionary statements

#### Pictogram



#### Signal word

No data available

#### Hazard statement(s)

H350 May cause cancer.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H362 May cause harm to breast-fed children.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statement(s)

P201 Obtain special instructions before use.

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Other hazards

None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms: (17)-estra-1,3,5(10)-triene-3,17-diol  
17-estradiol, -Estradiol, E2, 17-Oestradiol

Formula:  $C_{18}H_{24}O_2$

Molecular Weight: 272.38

CAS No.: 50-28-2

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### Eye contact

Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water. Separate eyelids with fingers to ensure adequate flushing. Promptly call a physician.

#### Skin contact

Rinse skin thoroughly with large amounts of water. Remove contaminated clothing and shoes and call a physician.

#### Inhalation

Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

#### Ingestion

Wash out mouth with water; Do NOT induce vomiting; call 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).

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

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.

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

During combustion, may emit irritant fumes.

## **5.3 Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing.

## **6. ACCIDENTAL RELEASE MEASURES**

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

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Refer to protective measures listed in sections 8.

### **6.2 Environmental precautions**

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

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

Absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); Decontaminate surfaces and equipment by scrubbing with alcohol; Dispose of contaminated material according to Section 13.

## **7. HANDLING AND STORAGE**

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

Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.

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

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition.

Store at -20°C(powder) or -80°C( in solvent)

### **7.3 Specific end use(s)**

No data available.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

This product contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Engineering controls**

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

#### **Personal protective equipment**

##### **Eye protection**

Safety goggles with side-shields.

##### **Hand protection**

Protective gloves.

##### **Skin and body protection**

Impervious clothing.

##### **Respiratory protection**

Suitable respirator.

##### **Environmental exposure controls**

Keep the product away from drains, water courses or the soil.  
Clean spillages in a safe way as soon as possible.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	solid
<b>Odor</b>	No data available
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting/freezing point</b>	No data available
<b>Boiling point/range</b>	No data available
<b>Flash point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability or explosive limits</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	<1 mg/mL
<b>Partition coefficient</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available

## 9.2 Other safety information

No data available.

## 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

No data available.

### 10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

### 10.6 Hazardous decomposition products

Under fire conditions, may decompose and emit toxic fumes.

Other decomposition products - no data available.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Classified based on available data. For more details, see section 2.

#### Skin corrosion/irritation

Classified based on available data. For more details, see section 2.

**Serious eye damage/irritation**

Classified based on available data. For more details, see section 2.

**Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2.

**Germ cell mutagenicity**

Classified based on available data. For more details, see section 2.

**Carcinogenicity**

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

ACGIH: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by ACGIH.

NTP: No component of this product present at a level equal to or greater than 0.1% is identified as a anticipated or confirmed carcinogen by NTP.

OSHA: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by OSHA.

**Reproductive toxicity**

Classified based on available data. For more details, see section 2.

**Specific target organ toxicity - single exposure**

Classified based on available data. For more details, see section 2.

**Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2.

**Aspiration hazard**

Classified based on available data. For more details, see section 2.

**Additional information**

RTECS No.: Unavailable

This information is based on our current knowledge. However the chemical, physical, and toxicological properties have not been completely investigated.

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

No data available.

### **12.2 Persistence and degradability**

No data available.

### **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 unavailable as chemical safety assessment not required or not conducted.

### **12.6 Other adverse effects**

No data available.

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

**Product**

Dispose substance in accordance with prevailing country, federal, state and local regulations.

**Contaminated packaging**

Conduct recycling or disposal in accordance with prevailing country, federal, state and local regulations.

**14. TRANSPORT INFORMATION**

**DOT (US)**

This substance is considered to be non-hazardous for transport.

**IMDG**

This substance is considered to be non-hazardous for transport.

**IATA**

This substance is considered to be non-hazardous for transport.

**15. REGULATORY INFORMATION**

**SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold values.

**16. OTHER INFORMATION**

The above information is believed to be correct based on our present knowledge but does not purport to be complete. The product is for research use only and for trained personnel. The burden of safe use of this material rests entirely with the user. SELLECK CHEMICALS disclaims all liability for any damage resulting from use of this material.