

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v1  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name :  $\beta$ -Estradiol  
Product Number : E110144  
Brand : aladdin  
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 Company

Company : ALADDIN SCIENTIFIC CORPORATION  
Address : 14078 Meridian Parkway,  
Riverside, CA. 92518  
Telephone : +1 (833) 552-7181  
Fax : no data available

### 1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300  
CHEMTREC®, Outside the USA :

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H350 : May cause cancer  
H360 : May damage fertility or the unborn child  
H400 : Very toxic to aquatic life

Precautionary statement(s)

P201 : Obtain special instructions before use.  
P273 : Avoid release to the environment.  
P280 : Wear protective gloves/protective clothing/eye protection/face protection.

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 14078 Meridian Parkway, Riverside, CA. 92518

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

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

**SECTION 3: Composition/information on ingredients**

**3.1 Substances**

Synonyms : 1,3,5-Estratriene-3,17β-diol 17β-Estradiol 3,17β-Dihydroxy-1,3,5(10)-estratriene Dihydrofolliculin  
 Formula : C18H24O2  
 Molecular weight : 272.38  
 CAS No. : 50-28-2  
 EC-NO. : 200-023-8

Component	Classification	Concentration
β-Estradiol	no data available	98%

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

General advice  
 no data available  
 If inhaled  
 no data available  
 In case of skin contact  
 no data available  
 In case of eye contact  
 no data available  
 If swallowed  
 Do not feed anything from the mouth to an unconscious person. Rinse your mouth with water.

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

no data available

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

no data available

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media

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Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

Unsuitable extinguishing media

no data available

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for firefighters

If necessary, wear a self-contained breathing apparatus to put out the fire.

## 5.4 Further information

no data available

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## SECTION 6: Accidental release measures

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

Do not generate dust during collection and disposal. Sweep and shovel away. Place in a suitable closed container for processing

### 6.2 Environmental precautions

Do not allow the product to enter the sewer.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 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

No data available

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

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place.

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

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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

no data available

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 Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

no data available

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) 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

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	175~ 180°C
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available

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r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

## 9.2 Other safety information

no data available

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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

no data available

### 10.5 Incompatible materials

strong oxidant

### 10.6 Hazardous decomposition products

no data available

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

May be harmful if absorbed through skin. May cause skin irritation.

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Cell Mutability - In vitro Testing - Rats - Other Cell Types DNA Damage Cell Mutability - In vivo Testing - Rats - Oral

Morphological Deformation

Carcinogenicity

The U.S. National Toxicology Research Program (Report 10 on Carcinogens) has identified steroid estrogens as

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human carcinogens because of substantial evidence demonstrating a causal relationship between exposure to steroids and the development of human tumors. This product is or contains components classified as suspected human carcinogens by IARC, ACGIH, EPA, and NTP. There are no components in this product at levels greater than or equal to 0.1% that are identified by IARC as possible or definite human carcinogens.

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

no data available

Additional Information

no data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

LC50 for fish - rainbow trout (red trout) - > 0.5 mg/l - 96 h

### 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

no data available

### 12.6 Other adverse effects

no data available

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## SECTION 13:

### 13.1 Disposal considerations

Product

no data available

Contaminated packaging

Dispose of as unused product.

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### SECTION 14: Transport information

**DOT (US)**

UN number: no data available	Packing group: -	Class: -
Proper shipping name: Not dangerous goods	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: No
Environmental Hazards: No		

**IMDG**

UN number: no data available	Packing group: -	EMS-No: No
Proper shipping name: Not dangerous goods		

**IATA**

UN number: no data available	Packing group: -	Class: -
Proper shipping name: Not dangerous goods		

### SECTION 15: Regulatory information

no data available

### SECTION 16: Other information

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