

Estradiol USP

SDS Preparation Date 06/28/2017

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SAFETY DATA SHEET

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

Product Identifier:

Identification on the label/ Tradename:

Estradiol USP (CAS: 50-28-2)

Identification of the Product:

Formula:

$C_{18}H_{24}O_2$

Chemical Name:

1,3,5-estratriene-3,17beta-diol, 17beta-estradiol, 3,17beta-dihydroxy-1,3,5(10)-estratriene, dihydrofolliculin, (8alpha,9beta,13alpha,14beta,17alpha)-estra-1,3,5(10)-triene-3,17-diol, Beta-Estradiol, β -estradiol

Relevant identified uses of the substance and uses advised against:

Identified Uses:

Pharma active ingredients

Uses Advised Against:

No information available

Name, address, and telephone number of the manufacturer:

Refer to Supplier

Name, address, and telephone number of the supplier:

Encore Scientific

801 West New Orleans Street Broken Arrow, OK, USA 74011

Supplier's Telephone #

800-454-2304 Monday to Friday 8:00 am to 6:00 pm (Central time)

24 Hr. Emergency Tel #

INFOTRAC: (800) 535-5053 (Within Continental US and Canada); (352)323-3500 (International)

Section 2 Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS08 Health hazard

Carc. 2

H351 Suspected of causing cancer.

Repr. 1B

H360 May damage fertility or the unborn child.



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Label elements

Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labeled according to the CLP regulation.

Hazard pictograms GHS08, GHS09

Signal word Danger

Hazard statements

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H400 Very toxic to aquatic life.

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Section 2 Hazards Identification (Continued)

Precautionary statements

- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P273: Avoid release to the environment.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P391: Collect spillage.
- P405: Store locked up.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment: PBT: Not applicable. vPvB: Not applicable.

Section 3 Composition/information on ingredients

Components	CAS No.	Weight %
Estradiol	50-28-2	100

Section 4 First aid measures

Description of first aid measures

- After inhalation:** Supply fresh air; consult doctor in case of complaints.
- After skin contact:** Call a doctor immediately.
- After eye contact:** Call a doctor immediately.
- After swallowing:** Call a doctor immediately.

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

Section 5 Fire-Fighting measures

Extinguishing media

- Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture:** No further relevant information available.

Advice for Firefighters

Protective equipment: Wear self-contained respiratory protective device.

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Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation

Environmental precautions: Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 Handling and storage

Precautions for safe handling: Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

Specific end use(s) No further relevant information available.

Section 8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Section 8 Exposure Controls/Personal Protection (Continued)

Eye protection: Not required.

Body protection: Protective work clothing

Section 9 Physical and chemical properties

Information on basic physical and chemical properties:

Physical state:	Solid. (Solid crystalline powder.)
Color:	White.
Odor:	Odorless
Odor threshold:	No data available
pH:	Not applicable
Evaporation rate:	No data available
Melting/Freezing point:	176-180 °C (349-356 °F)
Boiling point:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	No data available
Relative vapor density at 20 °C:	No data available
Relative density:	No data available
Solubility:	No data available.
Water/Oil Dist. Coeff.:	No data available.
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available.
Explosive limits:	No data available

Other information

___Molecular formula	C ₁₈ H ₂₄ O ₂
___Molecular weight	272.382

Section 10 Stability and reactivity

Reactivity	No reactivity hazards known.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Reacts with strong oxidizing agents
Conditions to avoid	Strong oxidizing agents
Incompatible materials	Strong oxidizing agents
Hazardous decomposition Products	Carbon monoxide and carbon dioxide

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Section 11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin: No irritant effect.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Substance is not listed.
NTP (National Toxicology Program) Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

Section 12 Ecological information

Aquatic Toxicity: IC50 (96h): 0.000002 mg/l (Fish)

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Ecotoxicological effects: Remark: Very toxic for fish

Additional ecological information: General notes: Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

Section 13 Disposal considerations

Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

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Section 14 Transport information

UN-Number	-
UN proper shipping name	-
Transport hazard class(es)	-
Packing group	-
Environmental hazards:	Environmentally hazardous substance, solid
Marine pollutant:	No
Special precautions for user:	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

Section 15 Regulation information

Safety, health and environmental regulations/legislation specific for the substance or mixture:
 No further relevant information available.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16 Other information

Date of Preparation/Last Revision: 06/28/2017/-

Further information: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:

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