

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Estetrol

Catalog Number: sc-211425

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

Target Organs

Female reproductive system.

WHMIS Classification

D2A

Very Toxic Material Causing Other Toxic Effects

Carcinogen
Reproductive hazard

GHS Classification

Acute toxicity, Oral (Category 5)

Carcinogenicity (Category 2)

Reproductive toxicity (Category 1B)

GHS Label elements, including precautionary statements

Signal word Danger

Hazard statement(s)

H303 May be harmful if swallowed.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P281 Use personal protective equipment as required.

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

HMIS Classification

Health hazard: 1

Chronic Health Hazard: *

Flammability: 0

Physical hazards: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

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

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.



3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula: C₁₈H₂₄O₄

Molecular Weight: 304.38

CAS Registry #: 15183-37-6

EC#:

Synonyms: (15 α ,16 α ,17 β)-Estra-1,3,5(10)-triene-3,15,16,17-tetrol;
Estra-1,3,5(10)-triene-3,15 α ,16 α ,17 β -tetrol; 15 α -Hydroxyestriol; 3,15 α ,16 α ,17 β -Tetrahydroxyestra-1,3,5(10)-triene;

4. FIRST AID MEASURES

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust or aerosol formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust or aerosols. Provide appropriate exhaust ventilation at places where dust/aerosol is formed. Normal measures for preventative fire protection.

Conditions for safe storage

Keep container tightly close in a dry and well-ventilated place. Store at -20°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Use NIOSH (US) or CEN (EU) tested and approved particle/vapour respirators.

Hand protection

Handle with appropriate gloves. Gloves must be inspected prior to use.

Eye protection

NIOSH (US) or CEN (EU) approved safety glasses, goggles or face shield, as appropriate.

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid	Melting point	233-236°C	Vapour pressure	N/A
pH	N/A	Flash point	N/A	Water solubility	N/A
Boiling point	N/A	Lower explosion limit	N/A	Upper explosion limit	N/A
Ignition temperature	N/A			Density	N/A

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Irritation and corrosion

no data available

Sensitization

no data available

Carcinogenicity

IARC: To the best of our knowledge, this compound has not been identified as a possible or potential human carcinogen by IARC.

There is limited evidence for the carcinogenicity of estrogens in experimental animals. Studies in humans strongly suggest that the administration of estrogens is causally related to an increased incidence of endometrial carcinoma; there is no evidence that estetrol is different from other estrogens in this respect.

Reproductive toxicity

Possible reproductive effector

Additional Information

RTECS: substance is not listed

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Bioaccumulative potential

no data available

PBT and vPvB assessment

no data available

Persistence and degradability

no data available

Mobility in soil

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)/IMDG/IATA

Not dangerous goods

15. REGULATORY INFORMATION

DSL Status

Product is not on the Canadian DSL or NDSL list.

WHMIS Classification

D2A

Very Toxic Material Causing Other Toxic
Effects

Carcinogen
Reproductive hazard

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

7/12/2011