



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Estrone USP

55-1709

Section 1: Identification

Product Name Estrone USP
Commercial Name Bestrone, Estro-A, Estronol, Kestrone 5, Propagon-S, Theelin, Theogen, Destrone, Aquacrine, Crystogen, Oestrin, Oest
Product Use Not available
Restrictions On Use Not available
Product Code 55-1709
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Carcinogenicity, category 1 Reproductive toxicity, category 1
CFR 1910.1200

Signal Word DANGER

Hazard Statement(s) May cause cancer. May damage fertility or the unborn child.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention P202 Do not handle until all safety precautions have been read and understood.
Response P308 + P313 IF exposed or concerned: Get medical advice/attention.
Storage Not available
Disposal Not available

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Estrone
% By Weight 97.5%~103%
CAS# 53-16-7
Molecular Weight 270.37 g/mole
Chemical Formula C₁₈H₂₂O₂
Synonym(s) 1,3,5(10)-Estratrien-3-ol-17-one; 1,3,5(10)-Oestratrien-3-ol-17-one; 1,3,5-Estratrien-3-ol-17-one;
1,3,5-Oestratrien-3-ol-17-one; 3-Hydroxy-1,3,5(10)-oestratrien-17-one; 3-Hydroxy-17-keto-estra-1,3,5-triene;
3-Hydroxy-17-keto-oestra-1,3,5-triene; 3-Hydroxy-oestra-1,3,5(10)-trien-17-one

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Estrone	53-16-7	100	Not Available.	Not Available.

Section 4: First-Aid Measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Symptoms/Effects	
Acute	Not available
Delayed	Not available
Immediate Medical Attention	Not available.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam.

Unsuitable Extinguishing Media

Do not use water jet.

Products of Combustion

These products are carbon oxides (CO, CO₂).

Firefighters Special Equipment and Precautions

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks. When heated to decomposition it emits acrid smoke and fumes. Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Precautions: Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 7: Handling and Storage

Handling: Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents. Storage: Preserve in tight, light-resistant container

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available.
Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Section 9: Physical and Chemical Properties

Appearance	Small, white crystals or white to creamy white crystalline powder.		
Odor	Not available.		
Odor Threshold	Not available.		
Melting Point	Melts at about 260 °C	pH	Not available.
Freezing Point	Not available.	Vapor Pressure	Not available.
Boiling Point/Range	Not available.	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available.	Evaporation Rate	Not available.
Flash Point	Not available.	Autoignition temperature	Not available.
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Sparingly soluble in acetone and dichloromethane, and slightly soluble in chloroform, ethanol, methanol, and ethyl acetate		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	Sensitive to light.
Chemical Stability	Stable under normal temperatures and pressures
Hazardous Polymerization	Has not been reported.
Conditions to Avoid	Excess heat, dust generation, light, incompatible materials
Incompatible Materials	Reactive with oxidizing agents.
Hazardous Decomposition Products	Not available.

Section 11: Toxicological Information**RTECS** KG8575000**Acute Toxicity**

A single overdose of Estrone is unlikely to cause toxic effects. It may cause gastrointestinal tract irritation with abdominal cramps, nausea and vomiting. This material is readily absorbed from the gastrointestinal tract.

Skin Corrosion/Irritation

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Serious Eye Damage/Irritation

May cause eye irritation.

Respiratory or Skin Sensitization

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation. Avoid inhalation. May cause respiratory tract irritation and system effects

Germ Cell Mutagenicity

May affect genetic material (mutagenic).

Carcinogenicity

May cause cancer. Estrogens have been reported to increase the risk of endometrial, uterine, and breast cancer.

Reproductive Toxicity

Not available

Routes of Entry

Inhalation. Ingestion.

Symptoms Related to Exposure

Not available.

Potential Health Effects

CARCINOGENIC EFFECTS: Classified 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN].

Target Organ(s) reproductive system.

Section 12: Ecological Information**Ecotoxicity**

Not available

Persistence and Degradability

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Bioaccumulative Potential

Not available

Mobility in Soil

Not available

Other Adverse Effects

Not available

Section 13: Disposal Considerations**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Disposal of Container

Not available

Other Considerations

Not available

Section 14: Transport Information**DOT Classification**

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information**Regulations**

Not available.

Other

Not available.

Section 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The company shall not be held liable for any damage resulting from handling or from contact with the above product.