


Section 1: Identification

Common Name/Trade Name	ESTRADIOL USP (HEMIHYDRATE)	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Product Synonym(s)	N/A	
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

Section 2: Hazards Identification

Classification of Substance or Mixture	Carc. 1B, Repr. 1B, STOT RE 1, Lact	
Signal Word	Danger	
Hazard Statement(s)	H350 H360 H362 H372	May cause cancer May damage fertility or the unborn child May cause harm to breast-fed children Causes damage to organs through prolonged or repeated exposure
Pictogram(s)		
Precautionary Statement(s)	P201 P202 P260 P263 P264 P281 P314 P501	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing. Wash hands thoroughly after handling. Use personal protective equipment as required. Get Medical advice/attention if you feel unwell. Dispose of contents/container to an approved waste disposal plant.
Hazards Not Otherwise Classified	Exposure may produce an allergic reaction.	
Ingredient(s) with Unknown Toxicity	No data available	

Section 3: Composition/Information on Ingredients

Chemical Name	Estradiol Hemihydrate
Common Name	Estradiol USP (Hemihydrate)
CAS Number	35380-71-3
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	If you feel unwell, seek medical advice (show the label where possible). Delayed adverse effects possible.
If Inhaled	Move to fresh air in case of accidental inhalation. Assure fresh air breathing. Obtain medical attention if breathing difficulty persists.
In Case of Skin Contact	Rinse skin with water/shower. Wash with plenty of soap and water.
In Case of Eye Contact	Rinse with water while holding the eyes wide open. Contact lenses should be removed. Obtain medical attention if pain, blinking or redness persist.
If Swallowed	Rinse mouth out with water. The following symptoms may occur: (see section(s): 2, 4.2). If you feel unwell, seek medical advice. Prolonged medical observation may be indicated. (See section(s): 4.3).
Most Important Symptoms and Effects	See Heading 2. Indication of any immediate medical attention and special treatment needed in all cases of doubt, or when symptoms persist, seek medical attention. If possible show this sheet, if not available show packaging or label.

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Suitable extinguishing media Small amounts: Use extinguishing media appropriate for surrounding fire. Extinguishing blanket. Carbon dioxide. Dry powder. Large amounts: Not applicable. Unsuitable extinguishing media: Water may be ineffective in firefighting due to low solubility.
Special Hazards Arising From the Substance/Mixture	No additional information available
Special PPE and/or Precautions for Firefighters	Small amounts: Use normal individual fire protective equipment. Large amounts: Not applicable.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Avoid raising dust. Wear suitable protective clothing, gloves and eye or face protection. Avoid any direct contact with the product. Evacuate unnecessary personnel. Large amounts: Not applicable.
Methods and Materials Used for Containment	Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Wear suitable protective clothing and gloves.
Cleanup Procedures	Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Ensure waste is collected and contained. Clean thoroughly. Poorly soluble in water. Clean with the help of detergents. Collect all waste in suitable and labelled containers and dispose according to local legislation. Wash the non-recoverable remainder with: Sodium hypochlorite solution.

Section 7: Handling and Storage

Precautions for Safe Handling	Handle and open container with care. See Heading 8. Do not handle until all safety precautions have been read and understood. Avoid any direct contact with the product. Obtain special instructions before use. Handle in accordance with good industrial hygiene and safety procedures. Small amounts: Material should be handled in a laboratory hood whenever possible.
Conditions for Safe Storage	Comply with applicable regulations. To guarantee the quality and properties of the product, keep: dry, Keep in a cool, well-ventilated place away from heat. Store in original container. Store according to local legislation. Incompatible products Strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	No additional information available
Appropriate Engineering Controls	Material should be handled in a laboratory hood whenever possible. Gloves. Safety glasses. Protective clothing. Dust production: dust mask with filter type P3.
PPE - Eye/Face Protection	Wear eye protection. DIN EN 166.
PPE - Skin Protection	Gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). Lab coat. Wear suitable protective clothing. DIN EN 13034.
PPE - Body Protection	Lab coat. Wear suitable protective clothing. DIN EN 13034.
PPE - Respiratory Protection	Quarter mask (DIN EN 140). Wear appropriate breathing apparatus if air renewal not sufficient to maintain dust/vapour under TLV.

Section 9: Physical and Chemical Properties

Appearance	White or creamy white, small crystals or crystalline powder
Upper/Lower Flammability or Explosive Limits	No data available
Odor	Odorless
Vapor Pressure	No data available
Odor Threshold	No data available
Vapor Density	No data available
pH	No data available
Relative Density	No data available
Melting Point/Freezing Point	173 - 179 °C
Solubility	Soluble in dioxane, in acetone, sparingly soluble in ethanol.
Initial Boiling Point and Boiling Range	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability (Solid, Gas)	No data available
Partition Coefficient	Log Pow 3,94 at 20°C (6.10)
Auto-Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

Section 10: Stability and Reactivity

Reactivity	Stable under normal conditions.
Chemical Stability	No additional information available
Possibility of Hazardous Reactions	Small amounts: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. Large amounts: Not applicable.
Conditions to Avoid	No additional information available
Incompatible Materials	Small amounts: None under normal use. Large amounts: Not applicable.
Hazardous Decomposition Products	When heated to decomposition, emits dangerous fumes. Large amounts: Not applicable.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	Not classified
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity IARC	May cause cancer.
Carcinogenicity ACGIH	May cause cancer.
Carcinogenicity NTP	May cause cancer.
Carcinogenicity OSHA	May cause cancer.
Reproductive Toxicity	May damage fertility. May damage the unborn child. May cause harm to breast-fed children.
Specific Target Organ Toxicity - Single Exposure	Not classified
Specific Target Organ Toxicity - Repeated Exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration Hazard	Not classified

Section 12: Ecological Information

Toxicity	Small amounts: See Heading 2. Poorly soluble in water. No data available on ecotoxicity. Hazardous waste. Use suitable disposal containers. Large amounts: Not applicable.
Persistence and Degradability	No additional information available
Bio-accumulative Potential	Log Pow 3.94 at 20°C (6.10)
Mobility in Soil	No additional information available
Other Adverse Effects	No additional information available

Section 13: Disposal Considerations

Waste Treatment Methods Product	Dispose in a safe manner in accordance with local/national regulations.
Waste Treatment Methods Packaging	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	Not dangerous goods.
UN Proper Shipping Name	N/A
Transport Hazard Class(es)	N/A
Packaging Group	N/A
Environmental Hazards	N/A

Section 15: Regulatory Information

No data available.

Section 16: Other Information

Additional Information	N/A
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