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# **Product Information**

# β-Estradiol analytical standard

Catalog Number **E1132**Lot Number 051M5007
Store at Room Temperature

CAS RN 50-28-2

Synonyms: Estra-1,3,5(10)-triene-3,17-diol,  $(17\beta)$ -Estra-1,3,5(10)-triene-3,17 $\beta$ -diol.

### **Product Description**

Molecular Formula: C<sub>18</sub>H<sub>24</sub>O<sub>2</sub> Molecular Weight: 272.38 This product meets USP specifications (Current through USP 34, 1st supplement) and is traceable to USP Reference Standard lot M0E309.

#### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### **Preparation Instructions**

Dry a portion at 80 °C for 4 hours before use. Use promptly. Discard unused material.

#### Storage/Stability

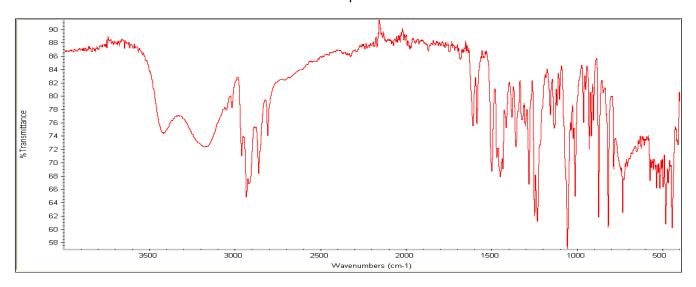
Store in a sealed vial at room temperature.

#### KSP,MAM 10/11-1

| TEST   | USP 34 SPECIFICATIONS   | Result Analytical Standard Lot 051M5007 |
|--|---|---|
| Infrared asorption spectrum KBr dispersion <197M>                              | compares to standard  | compares to standard                    |
| Ultraviolet absorption<br>spectrum 50µg/mL in<br>alcohol <197U>                | compares to standard and absorptivities at 280 nm, calculated on the anhydrous basis, do not differ by more than 3.0% | meets requirements                      |
| Melting range, °C<br>Class 1 <741>   | between 173 °C and 179 °C   | 176-178 °C                              |
| Specific rotation, $[\alpha]_D^{25}$<br>10 mg/mL solution in<br>dioxane <781S> | between +76° and +83°   | +81°                                    |
| Water Method 1 <921>   | not more than 3.5%  | 3.3%                                    |
| Residual Solvents  | meets the requirements  | conforms(class 3 solvents only <0.5%)   |
| Chromatographic purity <621>   | not more than 0.5% of any individual impurity is found, and not more than 1.0% of total impurities is found           | conforms                                |
| Assay - HPLC <621>   | not less than 97% and not more than 103%, calculated on the anhydrous basis   | 99.9%                                   |

See reverse side for IR and UV spectra of Analytical Standard

## Infrared Spectrum KBr Dispersion



Ultraviolet Spectrum 50 μg/ml in alcohol

