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# **Product Information**

# β-Estradiol analytical standard

Catalog Number **E1132**Lot Number 069K5010V
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 32) and is traceable to USP Reference Standard lot L0C337.

#### **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  $^{\circ}\text{C}$  for 4 hours before use. Use promptly. Discard unused material.

## Storage/Stability

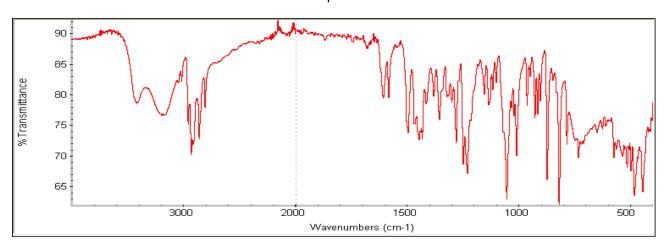
Store in a sealed vial under argon protected from light at room temperature.

CJH,MAM 10/14-1

TEST	USP 32 SPECIFICATIONS	Result Sigma Reference Standard Lot 069K5010V
Infrared asorption spectrum KBr dispersion <197A>	compares to standard	compares to standard
Ultraviolet absorption	compares to standard and absorptivities at	moeto requiremente
spectrum 50 μg/mL in alcohol <197U>	280 nm, calculated on the anhydrous basis, do not differ by more than 3.0%	meets requirements
Melting range, °C  Class 1 <741>	between 173 °C and 179 °C	176–179 °C
Specific rotation, $[\alpha]_D^{p_5}$ 10 mg/mL solution in dioxane <781S>	between +76° and +83°	+81.6°
Water Method 1 <921>	not more than 3.5%	3.4%
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	103%

See reverse side for IR spectrum of Sigma Reference Standard

## Infrared Spectrum KBr Dispersion



# Ultraviolet Spectrum

# 50 μg/mL in alcohol

