SIGMA-ALDRICH®

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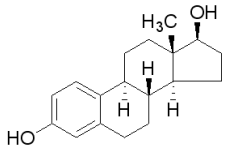
Product Information

β-Estradiol
Sigma Reference Standard

Catalog Number **E1132**
Lot Number 069K5010
Store at Room Temperature

CAS RN 50-28-2
Synonyms: Estra-1,3,5(10)-triene-3,17-diol, (17β)-Estra-1,3,5(10)-triene-3,17β-diol



Product Description
Molecular Formula: $C_{18}H_{24}O_2$
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 °C for 4 hours before use. Use promptly. Discard unused material.

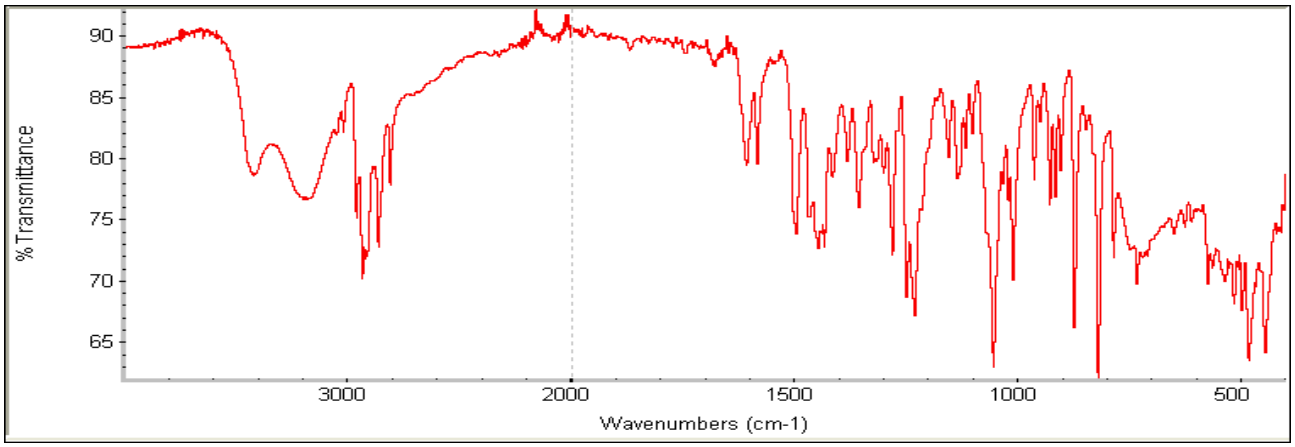
Storage/Stability
Store in a sealed vial under argon protected from light at room temperature.

CJH,MAM 02/10-1

TEST	USP 32 SPECIFICATIONS	Result Sigma Reference Standard Lot 069K5010
Infrared asorption spectrum KBr dispersion <197A>	compares to standard	compares to standard
Ultraviolet absorption spectrum 50 µg/mL in 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 *Class 1* <741>	between 173 °C and 179 °C	176–179 °C
Specific rotation, $[\alpha]_D^{25}$ 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