



## Product Information

### ESTRADIOL SIGMA REFERENCE STANDARD

Product No. **E1132**

Lot No: 90K8801

Storage Temperature: room temperature

Formula:  $C_{18}H_{24}O_2$

Formula Weight: 272.39

CAS No: 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

This product meets USP specifications (Current through USP 24, 2nd Supplement), and is traceable to USP Reference Standard lot K.

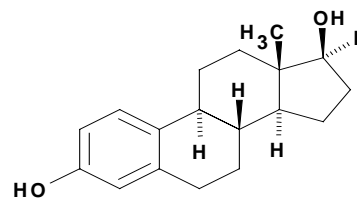
Store in sealed vial, protected from light. Use the material promptly and discard the unused portion.

TEST	USP 24 SPECIFICATIONS	Result Sigma R.S. Lot 90K8801
Infrared absorption spectrum mineral oil dispersion (197M)	compares to standard	conforms to USP RS Lot K
Ultraviolet absorption 50 $\mu$ g/mL in alcohol solution (197U)	compares to standard and absorptivities at 280 nm, calculated on the anhydrous basis, do not differ by more than 3.0%	meets requirement
Melting range, $^{\circ}$ C Class 1 (741)	between 173 $^{\circ}$ and 179 $^{\circ}$	175 – 178 $^{\circ}$
Specific rotation, $[\alpha]_D^{25}$ 10 mg/mL solution in dioxane (781S)	between +76 $^{\circ}$ and +83 $^{\circ}$	+ 80 $^{\circ}$
Water Method 1 (921)	not more than 3.5%	3.0
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	passes
Assay - HPLC (621)	not less than 97% and not more than 103%, calculated on the anhydrous basis	100.7%

See reverse side for IR and UV spectra spectrum of Sigma Reference Standard.

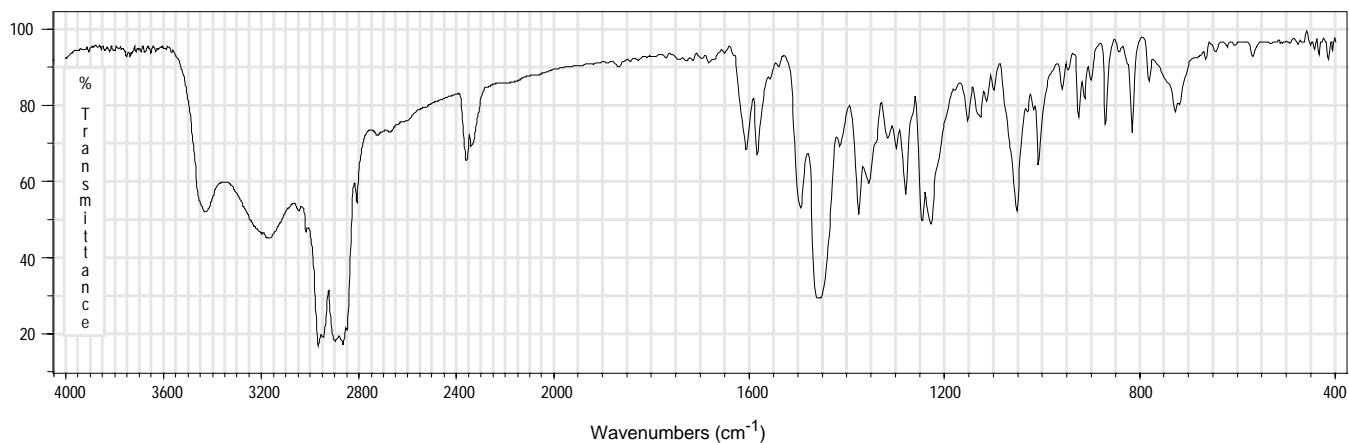
**ESTRADIOL**  
**SIGMA REFERENCE STANDARD**

Product No.E1132  
Lot 90K8801



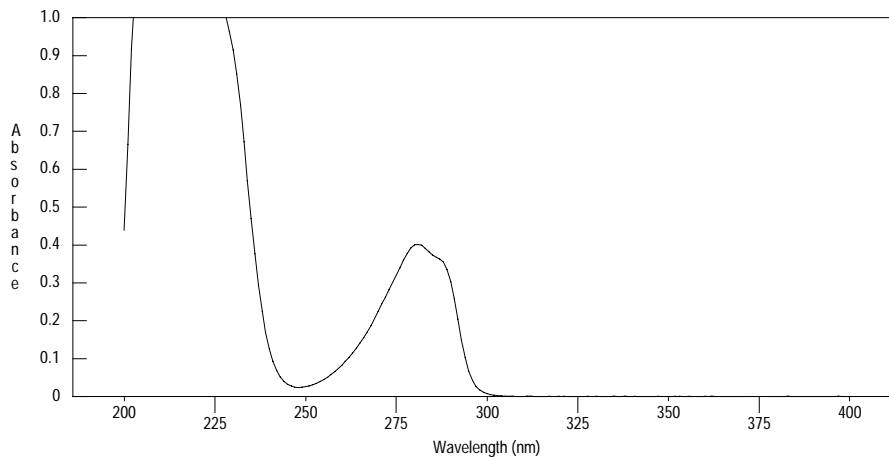
**INFRARED SPECTRUM**

Mineral oil dispersion



**ULTRAVIOLET SPECTRUM**

51.6 µg/mL in ethanol



10/2000

Sigma brand products are sold through Sigma-Aldrich, Inc.  
Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications.  
Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply.  
Please see reverse side of the invoice or packing slip.