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### **ProductInformation**

# ESTRADIOL SIGMA REFERENCE STANDARD

Product No. E1132

Lot No: 91K8804 CAS No: 50-28-2

Storage Temperature: room temperature

Synonyms: Estra-1,3,5(10)-triene-3,17-diol, (17β)-.

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

Formula:  $C_{18}H_{24}O_2$ Formula Weight: 272.39

**Product Description** 

This product meets USP specifications (Current through USP 24, 4th Supplement), and is traceable to USP Reference Standard lot K.

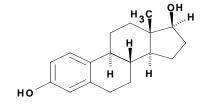
Store in sealed vial, protected from light. Use the material promptly and discard the unused portion.

TEST	USP 24 SPECIFICATIONS	Result Sigma R.S. Lot 91K8804
Infrared absorption spectrum mineral oil dispersion (197M)	compares to standard	conforms to USP RS Lot K
Ultraviolet absorption 50 μg/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, °C Class 1 (741)	between 173° and 179°	175° – 178°
Specific rotation, [α] <sub>D</sub> <sup>25</sup> 10 mg/mL solution in dioxane ⟨781S⟩	between +76° and +83°	+ 80°
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.

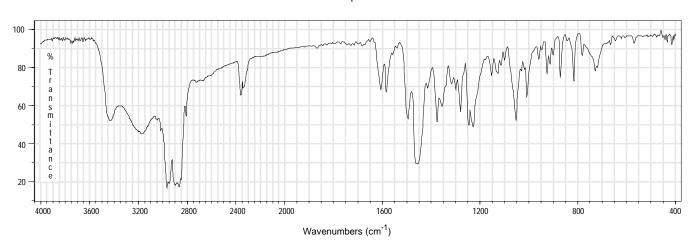
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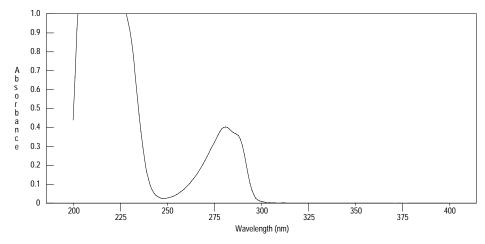
#### **INFRARED SPECTRUM**

#### Mineral oil dispersion



#### ULTRAVIOLET SPECTRUM

#### 51.6 μg/mL in ethanol



9/2001

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