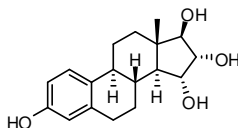




Certificate of Analysis

Axon Catalogue ID: 1926 **Batch Number:** 1
Product Name: Estetrol
Alternative Name(s): N.A.
IUPAC Name: (8R,9S,13S,14S,15R,16R,17R)-13-Methyl-7,8,9,11,12,13,14,15,16,17-decahydro-6H-cyclopenta[a]phenanthrene-3,15,16,17-tetraol

Structure:



Amount:

CAS number(s): 15183-37-6
Molecular Formula: C₁₈H₂₄O₄ **Molecular Weight:** 304.38
Batch Molecular Formula: C₁₈H₂₄O₄.1H₂O **Batch Molecular Weight:** 322.40
Appearance: White solid **Observed mp:** 244 - 247 °C
TLC (R_f): 0.25 DCM/MeOH (9:1)
Chemical Purity: 99.5%
Optical Purity (ee): Optically pure
¹H-NMR (300 MHz): Analytical data confirm chemical structure
Mass Spec: Analytical data confirm chemical structure
Microanalysis: Calculated: C 67.06, H 8.13, N 0.00; Found: C 66.87, H 8.27, N <0.10
Storage Conditions: Store at +4 °C

| Solubility Data: | Solvent | Solubility (mg/ml) | Solubility (mM) | Remarks |
|------------------|----------------|--------------------|-----------------|------------|
| | Water | | | Not Tested |
| | 0.1N NaOH (aq) | | | Not Tested |
| | 0.1N HCl (aq) | | | Not Tested |
| | DMSO | 32.2 | >100 mM | |
| | EtOH | | | Not Tested |

Remarks:

QC Date: 12-12-2019

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to info@axonmedchem.com indicating Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only