

3050 Spruce Street, Saint Louis, MO 63103, USA

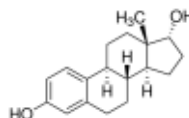
Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

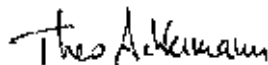
Product Name:

 α -Estradiol - powder, $\geq 98\%$ (TLC)

Product Number: E8750
Batch Number: 039M4115V
Brand: SIGMA
CAS Number: 57-91-0
Formula: C₁₈H₂₄O₂
Formula Weight: 272,38 g/mol
Quality Release Date: 03 MAR 2019
Recommended Retest Date: MAR 2022



Test	Specification	Result
Appearance (Form)	Powder	Powder
Appearance (Colour)	White to White w/ Yellow Cast	White
Solubility (Solvent)	Ethanol	Ethanol
Solubility (Conc)	49.00 - 51.00 mg/ml	50.00 mg/ml
Solubility (Heating)	Yes	Yes
Solubility (Turbidity)	Clear	Clear
Solubility (Color)	Colorless	Colorless
Water (by Karl Fischer)	$\geq 0.00\%$	0.17 %
Elemental Anal. (%C anhydrous)	78.87 - 79.87 %	79.11 %
NMR (Solvent)	DMSO-d ₆	DMSO-d ₆
Identity by NMR	Consistent	Consistent with Control
Purity (TLC)	$\geq 98.00\%$	99.00 %
Purity (HPLC)	$\geq 98.00\%$	100.00 %
Specific Rotation (Solvent)	Ethanol	Ethanol
Specific Rotation (Alpha D)	52.00 - 56.00 deg	53.30 deg
UV (Solvent)	Ethanol	Ethanol
UV (EmM at Lambda max)	1.80 - 2.20	1.97



Theo Ackermann PhD MScEng CQM
Manager, Quality and Regulatory Affairs
Jerusalem, Israel IL

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.