

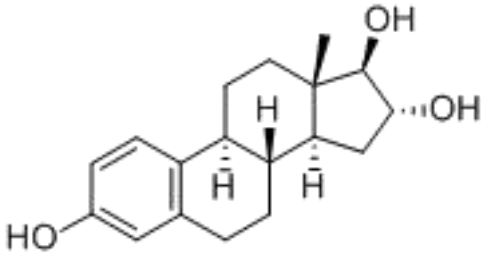


# Wuhan HengHeDa Pharm Co., Ltd

Tel:86-27-84888681 Fax:86-27-84888682

Wuhan Economic& Technological Development Zone, Wuhan, China

## CERTIFICATE OF ANALYSIS

Product name	Estriol	
CAS NO	50-27-1	
Molecular formula	C18H24O3	
Molecular weight	288.38	
Quantity	5KG	
Batch NO	HHD20220627	
Production date	2022.06.27	
Expiry Date	2026.06.26	
Test based on enterprise standard		
Test Item	Specification	Result
Appearance	White or practically white powder	Conform
Identification (by IR)	A: IR; B: UV	Conform
Completeness of solution (TO the naked eye detection)	The solution is clear and free from undissolved solid	Conform
Solubility (TO the naked eye detection)	Soluble in acetone, in chloroform, in dioxane, in ether and in vegetable oil, sparingly soluble, in ethanol, insoluble in water	Conform
melting point (by smelting point instrument)	About 280°C	279.5 -280.9°C
Loss on drying ( High temperature oven)	≤0.50%	0.13%
Specific rotation (by UV)	+54° ~+62°	+57.3°

Residual on ignition (High temperature oven)	$\leq 0.10\%$	0.03%
Related substances Total impurities (by UV)	$\leq 2.0\%$	0.51%
Residual solvents (by GC)		
Methanol	$\leq 3000$ ppm	102 ppm
Acetone	$\leq 5000$ ppm	211 ppm
Methylene chloride	$\leq 600$ ppm	Not detected
Assay (by UV)	97.0-102.0%	99.46%
Micron (by Malvern 3000)	$100\% \leq 20\mu\text{m}$	$100\% \leq 20\mu\text{m}$

Storage	Store in cool & dry place, keep away from strong light and heat.
Shelf life	4 years when properly stored.
Conclusion: This product complies with above specification.	

Inspector  
Shen Wu

Director  
King Yang

