



Certificate of analysis

Product name: Estradiene dione-3-keta

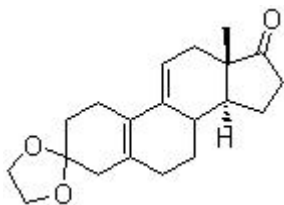
Cas number: 5571-36-8

Molecular Formula: $C_{20}H_{26}O_3$

Molecular Weight: 314.42

Date of production: May. 25, 2013

Chemical structure:



ITEMS	SPECIFICATIONS	RESULTS
Appearance	White or almost white crystalline powder	Almost white crystalline powder
Melting range	$\geq 150^{\circ}\text{C}$	152~156 $^{\circ}\text{C}$
Specific rotation	$+300^{\circ} \sim +320^{\circ}$	$+311.1^{\circ}$
Loss on drying	$\leq 0.5\%$	0.1%
Single impurities Related substances (H.P.L.C.)	Single impurities $\leq 0.5\%$	0.28%
	Total impurities $\leq 1.0\%$	0.52%
Assay (HPLC)	$\geq 99.0\%$	99.5%

Conclusion: It complies with the Enterprise Standard.

Analyst: Zhao

Checker: Liu

Q.C Director. Fang F