



## Certificate of analysis

Product name: Ethynyl estradiol

Cas number: 57-63-6

Molecular Formula:  $C_{20}H_{24}O_2$

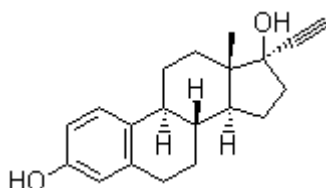
Molecular Weight: 296.41

Date of production: May. 05, 2018

Batch NO: 20180505

EXP DATE: May. 04, 2020

Chemical structure:



Items	Specifications	Results
Description	White to off-white crystalline powder	White crystalline powder
Identification	A infrared absorption Spectrophotometry should be consistent with the reference.	Conform
	B ultraviolet absorption Absorptivities at 281nm, calculated on the dried basis, do not differ by more than 3.0%	Conform
	C IR Conforms to structure	Conform
Clarity of solution	Clear and free from undissolved solids	Conform
Specific Rotation	- 28.0° ~ -29.5°	-28.7°
Loss on drying	NMT 1.0%	0.26%
Melting range	180~186°C	181~183°C
Residual solvents	Acetone NMT 5000ppm	364ppm
	Ethanol NMT 5000PPM	344ppm
	Tetrahydrofuran NMT 720ppm	N.D
Assay	97.0%~102.0% (On the dried basis)	99.5%

**Conclusion: It complies with the USP38 Standard.**

Analyst: Zhao

Checker: Liu

Q.C Director. Fang