

**杭州东瑞医药科技有限公司**  
**HANGZHOU DAWN RAY PHARMACEUTICAL CO.,LTD.**

**CERTIFICATE OF ANALYSIS**

**Tolvaptan**

<b>Batch No.:</b> DR20140324	<b>Piece:</b> 14.8kg
<b>Manufacture Date:</b> 2014.03.24	<b>Expiry Date:</b> 2016.03.23

**TESTS:**

Items	Specification	Results
Appearance	A white or off-white crystalline powder	White crystalline powder
Identification	HPLC: Retention time of the major peaks is consistent with the standard preparation as obtained in the assay	Conforms
	IR: The infrared absorption spectrophotometry is accordant with the contrast spectrophotometry	Conforms
	Chloride identification: positive reaction	Conforms
PH	5.5~7.5	6.3
Melting point	223~228°C	225.5~226.5°C
Water	≤0.5%	0.07 %
Related substance	Any individual impurity: ≤0.1%	0.01%
	Total impurities: ≤0.3%	0.04%
Residual solvent	Methyl alcohol ≤0.3%	≤0.003%
	Ethyl alcohol ≤0.5%	N,D
	Dichloromethane ≤0.06%	N,D
	Ethy acetate ≤0.5%	N,D
	Pyridine ≤0.02%	N,D
Chloride	≤0.014%	Conforms
Residue on ignition	≤0.1%	<0.05%
Heavy metals	≤10ppm	Conforms
Assay	98.0~102.0% of Tolvaptan ( C <sub>26</sub> H <sub>25</sub> CIN <sub>2</sub> O <sub>3</sub> ) calculated on the dry anhydrous	98.4%

Conclusion: The results conform to the standard



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