

## **Wanbury Limited**

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	Cer	tificate of Analysis			
Product : Metformin Hydrochloride BP/PhEur/USP					
Batch No.	: ME01370614	Mfg. Date	: June – 2014		
Qty. Supplied	: 1000 kg	Exp. Date	: May – 2019		
Customer Name	: R2 PHARMA	Mfg.Lic.No.	: KD-242		

Sr. No.	Tests	Observations	Specifications
01.	Appearance	White Crystals	White Crystals
	Solubility	Freely soluble in water, slightly soluble in alcohol	Freely soluble in water, slightly soluble in alcohol, practically insoluble in acetone and in methylene chloride
02.	Identification		Thomas and the second s
	B. IR Spectrum	Concordant	Infrared absorption spectrum of sample should concordant with that of Metformin hydrochloride working standard.
	E. Chloride	Positive	Should be positive
03.	Appearance of solution (10% solution in water)	Solution is clear and colourless	Should be clear and colourless
04.	Impurity F	0.044%	Not more than 0.05% w/w
05.	Related substances (by HPLC)  a) Impurity A  b) Impurity B  c) Unspecified impurities d) Total other impurities Heavy metals	BQL 0.017% 0.010% 0.043%	Not more than 0.02% w/w Not more than 0.05% w/w Not more than 0.05% w/w Not more than 0.2%
07.	Loss on drying at 105°C for 5 hours	Less than 10 ppm	Not more than 10 ppm
		0.18%	Not more than 0.5 %
08.	Sulphated ash	0.03%	Not more than 0.1 %
09.	Assay (% on dry basis)	99.4%	98.5% - 101.0% w/w
10.	Residual solvent a) Methanol b) Xylene	364 ppm BDL	Not more than 1000 ppm Not more than 500 ppm
11.	Bulk Density	0.74 g/ml	0.7 g/ml to 0.8 g/ml

Remarks: Product Complies with B.P-2011 / PhEur -8<sup>th</sup> Edition /USP-35/Customer Specifications/COS NO.: R1-CEP 1998-079-Rev. 06

Declaration: Product is free from animal derived materials and is manufactured from synthetic sources only.

Prepared By:	Checked By:	Approved By:
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Executive / Officer Date: 27-06-2019	Manager QC Date: 29/06/14	Asst. Manager QA Date: $27-06-2014$