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ZHUHAI UNITED LABORATORIES CO., LTD.

CERTIFICATE OF ANALYSIS

CONTAINER N°: INBU5448255/40' GP

D12071110881 NO:220805011

Name of product	Amoxicillin Trihydrate Compacted	Batch NO.	30912078041
Packing	25.00kg/drum	Pieces	40 drums +1drum
Batch Weight	1026.48kg	Specifications	EP and Enterprise standard
Mfg. Date	15/07/2012	Exp.Date	06/2015
Date of testing	15/07/2012	Date of report	05/08/2012
Storage	Store in the airtight container		
CEP: No.R0-CEP2007-191-Rev 02			

TESTS	SPECIFICATIONS	RESULTS	CONCLUSION
〔APPEARANCE〕	A white or almost white crystalline powder and granule.	A white crystalline powder and granule.	Conforms
〔IDENTIFICATION〕	Examine by IR absorption spectrophotometry. comparing with the spectrum obtained with amoxicillin trihydrate CRS	Conforms	Conforms
[SOLUBILITY]	It slightly soluble in water, very slightly soluble in ethanol (96 percent), practically insoluble in fatty oils. It dissolves in dilute acids and dilute solutions of alkali hydroxides.	Conforms	Conforms
〔TESTS〕			
Appearance of solution	Not more opalescent than reference suspension II (0.5M hydrochloric acid)	<reference suspension I	Conforms
	Not more opalescent than reference suspension II (dilute ammonia R2)	<reference suspension I	
pH	3.5 to 5.5	4.5	Conforms
Specific optical rotation	+ 290 to + 315	+300	Conforms
Related substances			Conforms
Any specified impurity	≤1.0%	0.27%	
Any unspecified impurity	≤ 0.10%	0.03%	
Total impurities	≤ 3.0%	0.63%	
N, N-Dimethylaniline	NMT 20 ppm (Not used in process)	Conforms	Conforms
Water	11.5% to 14.5%	12.8%	Conforms
Sulphated ash	NMT1.0%	0.050%	Conforms
Assay	95.0%~102.0% $C_{16}H_{19}N_3O_5S$ (Calculated on anhydrous basis)	99.8%	Conforms
Residual solvents			Conforms
a) Acetone	NMT800ppm	57 ppm	
b) Dichloromethane	NMT600ppm	344ppm	
c) Triethylamine	NMT300ppm	62 ppm	
d) N,N-dimethylacetamide	NMT1090ppm	264 ppm	
e) Toluene	NMT600ppm	320 ppm	
f) Pivalic acid	NMT1000ppm	599 ppm	
Bulk Density	0.45 g/ml to 0.65g/ml	0.56 g/ml	Conforms
Tapped Density	NLT0.65g/ml	0.79 g/ml	Conforms
Particle size	NMT15%(≥850 μ m)	4%	Conforms
	NLT55%(850 μ m～180 μ m)	78%	
	NMT30%(≤180 μ m)	18%	

CONCLUSION: The results conform with EP and Enterprise standard

Pharmacopoeia quality: Complies with the current editions of USP, EP & BP

Manufactured according to ICH Q7A GMP for APIs

REPORTED BY: CHECKED BY: APPROVED BY: