



CSPC INNOVATION PHARMACEUTICAL CO., LTD.

SAP 447221

CERTIFICATE OF PRODUCT ANALYSIS

15: 251851 4530131197

No. : REC-ZL-G6102 (04)

Product: Caffeine (Anhydrous) Batch No. : 1031502513 Quantity: 1000 kg
 Analysis Standard: BP2014, EP8.0, USP37 Analysis Date: 2015.03.01 Report Date: 2015.03.03
 Manu. Date: 2015.02 Retest Date: 2019.01 45000 60956

Analysis Contents	Analysis Standards	Analysis Results
【Characters】		
Appearance	White or almost white, crystalline powder (BP/EP) or silky, white or almost white, crystals	White crystalline powder
【Identification】		
A. Melting point	234~239℃ (BP/EP)	236.1~236.8℃
B. Infrared Absorption	Conforms to the caffeine Reference Spectrum (BP/EP)	Pass
E. Loss on drying	See Tests (BP/EP)	Pass
【Tests】		
Appearance of solution	Clear, colourless (BP/EP)	Pass
Heavy metals	≤10ppm (USP)	<10ppm
Sulphates	≤500ppm (BP/EP)	<500ppm
Related substances		
-Each impurity A, B, C, D, E, F	≤0.10% (BP/EP)	<0.10%
-Unspecified impurities	≤0.10% (BP/EP)	<0.10%
-Total impurities	≤0.1% (BP/EP)	<0.1%
Acidity	Not more than 0.2ml of 0.01M sodium hydroxide (BP/EP)	<0.2ml
Organic impurities		
-Individual impurities	≤0.1% (USP)	<0.1%
-Total impurities	≤0.1% (USP)	<0.1%
Loss on drying	≤0.5% (BP/EP)	0.09%
Residue on ignition	≤0.1% (USP)	0.05%
【Assay】	98.5%~101.0% (USP)	99.9%



Conclusion: The above product conforms to BP2014, EP8.0, USP37 requirement on Caffeine

Chief of Quality Analysis Dept: Rechecker: Reporter:

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