

## CERTIFICATE OF ANALYSIS

Product Name: Caffeine Anhydrous (BP2016, USP39)	
Other name: 1,3,7-trimethyl-3,7-dihydro-1H-purine-2,6-dione	
Molecular weight: 194.2	Molecular formula: C <sub>8</sub> H <sub>10</sub> N <sub>4</sub> O <sub>2</sub>
Chemical Abstract No.: 58-08-2	
RM. Code: CAFAX	Document no: CAFAX-02
Batch No.: 17091589	Quantity: 2000kg
Manufacture Date: Sep, 28 2017	Retest Date: Sep, 27 2021

Item:	Release specifications	Result	Standard
Description	White crystalline powder	Visual	
Identification	Melting point 234°C ~ 239°C IR Absorption conforms to reference. Loss on drying NMT. 0.5%	236.6°C Conforms 0.01%	BP BP BP
Assay	98.5 – 101.0%	99.8%	USP
Acidity	NMT. 0.2ml of 0.01M NaOH	0.03%	BP
Clarity of solution	Clear and colourless	Conforms	BP
Heavy Metals (Pb)	NMT. 20ppm	Conforms	BP
Residual solvents	NMT. 60ppm	Conforms	BP
Sulphates (SO <sub>4</sub> )	NMT. 500ppm	Conforms	BP
Related substances	Each impurity A, B, C, D, E, F; NMT. 0.10% Unspecified impurities; NMT. 0.10% Total impurities; NMT. 0.1%	Conforms Conforms Conforms	BP BP BP
Organic impurities	Individual impurities; NMT. 0.1% Total impurities; NMT. 0.1%	Conforms Conforms	USP USP
Residue on ignition	NMT. 0.1%	0.01%	USP
TVAC	NMT. 1,000/g	Conforms	USP
Fungi	NMT. 100/g	Conforms	USP
Escherichia Coli	Nil/g	Conforms	USP
Shelf life	48 months	In original packing conditions.	
Storage	In cool, dry place away from light at below 25°C.		
Packing	In 25kg drum		
Origin	China		

Conclusion: This batch is conforming with Enterprise Internal Standard.