

CERTIFICATE OF ANALYSIS

Product Name	Caffeine (Anhydrous)
Batch Number	1032405713
Manufacture Date	2024.05
Retest Date	2029.04
Analysis Date	2024.05.10
Report Date	2024.05.16

Physical & Chemical Characteristics

Analysis Item	Standards	Result
Appearance	White crystalline powder or silky, white crystals	White crystalline powder
Solubility	Sparingly soluble in water, freely soluble in boiling water; slightly soluble in ethanol (96%), dissolves in alkali benzoates/salicylates; sublimes readily	Pass
Identification - Infrared Absorption	Conforms to USP Caffeine RS	Pass
Identification - Retention time of caffeine peak	Corresponds to standard preparation in Assay	Pass
Appearance of solution (BP/EP)	Clear, colourless	Pass
Sulphates (BP/EP)	≤500 ppm	<500 ppm
Sulphated ash (BP/EP)	≤0.1%	0.03%
Loss on drying (BP/EP)	≤0.5%	0.04%
Organic impurities - Individual	≤0.1%	<0.1%
Organic impurities - Total	≤0.1%	<0.1%

Related substances (BP/EP) - Each impurity A,B,C,D,E,F	≤0.10%	<0.10%
Related substances (BP/EP) - Unspecified impurities	≤0.10%	<0.10%
Related substances (BP/EP) - Total impurities	≤0.10%	<0.10%
Acidity (BP/EP)	≤0.2 ml of 0.01M NaOH	<0.2 ml
Lead (FCC)	≤1 mg/kg	<1 mg/kg
Other alkaloids (FCC)	No precipitate formed	Pass
Melting Range (FCC)	235–237.5°C	Pass
Readily Carbonizable Substances (FCC)	Passes test	Pass
Assay (USP)	98.5%–101.0%	99.9%

Conclusion: The above product conforms to BP2024, EP11.0, USP2024, FCC12 requirement on Caffeine.

We hereby declare our product complies with GMP, ISO9001:2008.

We hereby certify our product is BSE/TSE free.