

## PRODUCT SPECIFICATION SHEET

### Caffeine, Anhydrous

USP Grade

Test	Specification	Typical Results
Assay by HPLC (anhydrous basis)	98.5-101.0%	99.95%
Description	White powder or granules or white glistening needles, usually matted together, odorless, bitter in taste. Its solution are neutral to litmus	Pass
Solubility	Sparingly soluble in water and in alcohol. Freely soluble in chloroform, Slightly soluble in ether.	Pass
Identification A	The infrared absorption spectrum of sample should be concordant with that of standard preparation of Caffeine WS	Pass
Identification B	The retention time of the Caffeine peak of the sample solution corresponds to that of the standard solution as obtained in the Assay test.	Pass
Residue on ignition	≤ 0.1%	0.05%
Heavy Metals	≤ 10 ppm	< 10 ppm
Arsenic	< 0.1 ppm	N.D.
Cadmium	< 4.1 ppm	N.D.
Lead	< 0.15 ppm	N.D.
Mercury	< 0.3 ppm	N.D.
Individual Organic Impurities	≤ 0.1%	0.01%
Total Organic Impurities	≤ 0.1%	0.02%
Water Determination	≤ 0.5%	0.24%

Total Aerobic Microbial Count	≤ 100 cfu/g	< 10 cfu/g
Total Combined Yeast and Mold Count	≤ 10 cfu/g	< 10 cfu/g
Total Coliforms	≤ 10 cfu/g	< 10 cfu/g
Escherichia coli	Absent/g	Absent/g
Salmonella	Absent/10g	Absent/10g
Pseudomonas aeruginose	Absent/g	Absent/g
Staphylococcus aureus	Absent/g	Absent/g
Candida Albicans	Absent/g	Absent/g

Appropriate/legal use of this product is the responsibility of the user