

# SAMPLE

## Certificate of Analysis

Product: Caffeine Anhydrous  
 Package Size: 44.092 LB CARTON

Certification Date:  
 Manufacture Date:  
 Recertification Date:

Lot Number:

THE FOLLOWING VALUES HAVE BEEN PROVIDED BY THE MANUFACTURER OF THIS PRODUCT.

Characteristic	Specification	Result
Appearance	White crystalline powder silky, white crystals	Pass
Identification:		
A. Infrared Absorption	Conforms to the USP Caffeine RS	Pass
B. The retention time of caffeine peak	Corresponds to the Standard preparation obtained in the Assay	Pass
Test:		
Appearance of solution	Clear, colourless	Pass
Sulphates	$\leq 500$ ppm	< 500 ppm
Related substances:		
Each impurity A/B/C/D/E/F	$\leq 0.10$ %	< 0.10 %
Unspecified impurities	$\leq 0.10$ %	< 0.10 %
Total impurities	$\leq 0.10$ %	< 0.10 %
Acidity	Not more than 0.2ml of 0.01M sodium hydroxide	< 0.2 ml
Organic impurities		
Individual impurities	$\leq 0.1$ %	< 0.1 %
Total impurities	$\leq 0.1$ %	< 0.1 %
Other Alkaloids	No precipitate is formed	Pass
Melting Range	235 – 237.5 C	236.0 – 236.8 C
Readily Carbonizable Substances	Passes test	Pass
Loss on drying	$\leq 0.5\%$	0.05 %
Residue on ignition	$\leq 0.1\%$	0.04 %
Assay	98.5 % - 101.0 %	99.8 %
Mesh	$\geq 95$ % through 40 mesh	Pass
*Odor	Odorless	Pass
*Flavor	Bitter	Pass
*Heavy Metals	$\leq 10$ ppm	< 10 ppm
*Arsenic	$\leq 1.5$ ppm	Pass
*Cadmium	$\leq 0.5$ ppm	Pass
*Lead	$\leq 0.5$ ppm	Pass
*Mercury	$\leq 0.2$ ppm	Pass
*pH	5.5 – 6.5	Pass

*Microbiological		
Total Count of Aerobic Bacteria	≤ 1000 cfu/g	Pass
Yeast & Mold	≤ 100 cfu/g	Pass
E. coli	Negative	Pass
Coliforms	< 10 cfu/g	Pass
Salmonella	Negative/10g	Pass
Staphylococcus aureus	Negative/1g	Pass