

CERTIFICATE OF ANALYSIS

Product Name	Guarana Extract		
Genus and Species	<i>Paullinin Cupana H.B.K.</i>		
Part of the Plant	Seeds		
Country of Origin	Brazil		
Batch Number	20220326	Manufacture Date	20220326
Report Date	20220326	Expiry Date	20240325

Item	Specification	Result	Method
Marker Compounds			
Caffeine	≥ 20%	20.16%	HPLC
Organoleptic Data			
Appearance	Powder	Conform	NLS-QCS-1008
Color	Brown	Conform	GB/T 5492-2008
Odor	Characteristic	Conform	GB/T 5492-2008
Taste	Characteristic	Conform	GB/T 5492-2008
Physical Characteristics			
Solubility	Soluble in Ethanol and water and insoluble in Benzene	Conform	Visual
Particle Size (80 mesh)	>95.0%	Conform	GB/T 5507-2008
Moisture	<5.0%	2.1%	GB/T 14769-1993
Ash Content	<3.0%	1.3%	AOAC 942.05, 18th
Solvent Residue	None	Conform	NLS-QCS-1007
Heavy Metals			
Total Heavy Metals	<10 ppm	Conform	USP <231>, method II
Arsenic	<1.0 ppm	Conform	AOAC 986.15, 18th
Lead	<1.0 ppm	Conform	AOAC 986.15, 18th
Mercury	<0.5 ppm	Conform	AOAC 971.21, 18th
Microbiology			
Total Plate Count	<1,000cfu/g	65cfu/g	AOAC 990.12, 18th
Total Yeast & Mold	<100cfu/g	12cfu/g	FDA (BAM) Chapter 18, 8th Ed.
E. Coli	Negative	Negative	AOAC 997.11, 18th
Salmonella	Negative	Negative	FDA (BAM) Chapter 5, 8th Ed.

Storage: Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Shelf Life: 24 months if store under the conditions above and stay in original packaging.

