

CERTIFICATE OF ANALYSIS

Guarana' seed dry extract $\geq 22,0\%$ Caffeine (partially added)

Botanic Name	Paullinia cupana Kunt
Part of plant used	Seed
Origin of Plant	Brazil
Extraction Solvent	Ethanol / Water (30/70 V/V)
Excipients	Maltodextrine
Auxiliary Substances	$\leq 0,5\%$ colloidal anhydrous silica
Bulk Density	about 0,5 g/ml
Particle size	$\geq 97\%$ thru sieve 250 - Eu.Ph (2.9.12)

Physical and Chemical tests

TEST	RESULTS	SPECIFICATIONS	METHODS
Characters	Brownish fine powder	Brownish fine powder	Inspection
Content	22,12% caffeine (partially added)	$\geq 22,0\%$ caffeine (partially added)	Gravimetric
Loss on drying	3,4%	$\leq 5\%$	Eu.Ph (2.8.17)
Residual Solvents	complies	$\leq 0,5\%$ ethanol	Eu.Ph (2.4.24)
Heavy Metals	complies	≤ 20 ppm	Eu.Ph (2.4.8C)
Benzo(a)pyrene	complies	< 10 ppb	Gas Chromatography
PAH4	complies	< 50 ppb	Gas Chromatography

Microbial contamination

Aerobic microorganism	complies	≤ 10000 c.f.u./g	Eu.Ph (2.6.12)
Moulds-Yeasts	complies	≤ 100 c.f.u./g	Eu.Ph (2.6.12)
Enterobacteriaceae	complies	≤ 100 c.f.u./g	Eu.Ph (2.6.12)
E.Coli (1g)	Absent	Absent	Eu.Ph (2.6.31)
Salmonella (25g)	Absent	Absent	Eu.Ph (2.6.31)
Staphylococcus aureus (1g)	Absent	Absent	Eu.Ph (2.6.31)

Statements & Declarations

- A color variation can occur from batch to batch since all natural products can have characters variation from crop to crop.
- Control made on raw materials complies to aflatoxine B1 < 5 ppb; total aflatoxin (sum of B1,B2, G1 and G2) < 10 ppb.
- Product complies Residual Solvents Dir.2009/32/EC
- Product complies to Food use EC/Reg.178/2002 and does not contain Antimicrobial Preservatives.
- Product does not contain allergens according to Dir.2003/89/EC, Annex III bis, and further amendments. There is no risk of cross-contamination in our products.
- Product is TSE/BSE and Melamine free. Product has not been irradiated.
- Product complies to EC/Reg.1829/2003 and 1830/2003 and does not contain and it is not manufactured from GMO components.
- Storage in cool, dark and dry place, 2 years shelf life.

