

CERTIFICATE OF ANALYSIS

Guarana 22% caffeine-100mesh

Batch No.: DR20160320	Quantity: 100kg
Manufacture Date: 2016.03.20	Retest Date: 2019.03.19

TESTS:

Items	Test Method	Specification	Results
Appearance	Visual	Brown to dark brown fine powder	Conforms
Identification	FTIR	Conforms to standard	Conforms
Sensory	Organoleptic	Conforms to standard	Conforms
Moisture	TQ-104	≤ 10.0%	3.1%
Bulk density	TQ-102(ASTM D7481)	Informative g/ml	0.43g/ml
Tap density	TQ-102(ASTM D7481)	Informative g/ml	0.68g/ml
Particle size	TQ-106(AOAC 973.03)	≥ 95%pass through 100mesh	100%
Caffeine(dried base)	TQ-118(HPLC)/Batch card review	≥ 22.00%	24.41%
pH	TQ-309	Informative	4.21
Microbiology			
Acrobic plate count	AOAC RI validation#121204	≤ 10,000 cfu/g	<100 cfu/g
E.Coli	AOAC 2009.02	Negative/10g	Negative/10g
Salmonella	AOAC 2001.09 or USP<2022>	Negative/10g	Negative/10g
Staphylococcus aureus	USP<2022>	Negative/10g	Negative/10g
Yeast & Mold	AOAC RI Performance Tested SM Method - Certificate#041001	≤ 200 cfu/g	<100 cfu/g
Coliforms	AOAC 966.24	≤ 100 cfu/g	<3 cfu/g
Heavy metals			
Arsenic	ICP/MS USP<730>	Informative(ppm)	0.013ppm
Cadmium	ICP/MS USP<730>	Informative(ppm)	0.003ppm
Lead	ICP/MS USP<730>	Informative(ppm)	0.005ppm
Mercury	ICP/MS USP<730>	Informative(ppm)	<0.003ppm
Conclusion: The results conform with the standard.			



Analyst: Joe Yu **Checker:** Agnes Zhong **QA Manager:** Sun Wenhua