



7511 Eastgate Road, Henderson, NV 89011 USA Telephone: 702-293-0222

CERTIFICATE OF ANALYSIS

Product:	L-Theanine	Product Lot No.:	116D0717
Product Batch No.:	20150718	Manu. Date:	Jul 17, 2015
Country of Origin:	China	Expiry Date:	Jul 16, 2017

Item	Specification	Result
Appearance	White crystalline powder	Conforms
Specific Rotation $[\alpha]_{D^{20}}$ (C=1, H ₂ O)	+7.5 to +8.5°	+8.0°
Assay	98.0% to 102.0%	99.2%
Melting Point	200°C to 210°C	202°C
Moisture	Not more than 1.0ppm	0.45%
Residue on Ignition	Not more than 0.2%	0.09%
pH	5.0 to 6.0	5.5
Chloride (Cl)	Not more than 0.02%	0.015%
Heavy Metals	Not more than 10ppm	7ppm
Iron (Fe)	Not more than 10ppm	5ppm
Lead (Pb)	Not more than 1ppm	Conforms
Mercury (Hg)	Not more than 0.2ppm	Conforms
Cadmium (Cd)	Not more than 0.3ppm	Conforms
Arsenic (As ₂ O ₃)	Not more than 4ppm	< 4ppm
Bulk Density	-	0.37g/ml
Tapped Density	-	0.48g/ml
Mesh Size	90% thru 60 mesh	90% thru 60 mesh
Total Plate Count	Not more than 1000cfu/g	Conforms
Yeast & Mold	Not more than 100cfu/g	Conforms
E. Coli	Negative	Negative
Salmonella	Negative	Negative
Staphylococcus Aureus	Negative	Negative
Conclusion	The product conforms to JP2000 standard.	

*This Certificate of Analysis is reflective of our supplier and /or independent laboratory.