## **CERTIFICATE OF ANALYSIS**

Product Name:	L-Theanine	Quantity:	50kg		
Batch Number:	19110201	Analysis Date:	2 <sup>nd</sup> Nov. 2019		
Production Date:	2 <sup>nd</sup> Nov. 2019	Re-Test Date:	1 <sup>st</sup> Nov. 2022		
CAS:	3081-61-6	Molecular Formula	C7H14N203		
Reference Standard:	JP2000 Standard				
Item	Specification	Results	Test Method		
Appearance	White crystalline Powder	Conforms	Visual		
Assay	98.0 – 102.0%	99.13%	HPLC		
Loss on Drying	≤ 0.5%	0.29%	Ch.P2020		
Residue on Ignition	≤ 0.2%	0.06%	Ch.P2020		
Tapped Density		0.45g/cm <sup>3</sup>			
Bulk Density		0.30g/cm <sup>3</sup>			
Particle Size	NLT 100% Through 80 mesh	100% Through 80 mesh	80 Mesh Screen		
Solubility (1.0g/20ml H2O)	+7.7 to +8.5 Degree	+8.0 Degree	Ch.P2020		
Chloride (CI)	≤ 0.02%	0.02%	Ch.P2020		
рН	5.0 – 6.0	5.11	Ch.P2020		
Melting Point	202 - 215°C	202.5 - 203°C	Ch.P2020		
Heavy Metals	≤ 10ppm	< 10ppm	Ch.P2020		
Arsenic	≤ 4ppm	< 4ppm	Ch.P2020		
Total Plate Count	< 1,000cfu/g	Conforms	Ch.P2020		
Yeast and Moulds	< 100cfu/g	Conforms	Ch.P2020		
E.Coli	Absent	Absent	Ch.P2020		
Salmonella	Absent	Absent	Ch.P2020		
Packaging & Storage	Packed in cardboard drums and 2 plastic bags inside. NW.: 25kg Store in a well-closed container away from moisture.				
Shelf Life	2 years if sealed and stored away from direct sun light and heat.				
Conclusion:	The product conforms to JP2000 Standard.				