

## CERTIFICATE OF ANALYSIS

<b>Product Name:</b>	L-Theanine	<b>Quantity:</b>	50kg
<b>Batch Number:</b>	19110201	<b>Analysis Date:</b>	2 <sup>nd</sup> Nov. 2019
<b>Production Date:</b>	2 <sup>nd</sup> Nov. 2019	<b>Re-Test Date:</b>	1 <sup>st</sup> Nov. 2022
<b>CAS:</b>	3081-61-6	<b>Molecular Formula</b>	C7H14N2O3
<b>Reference Standard:</b>	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 H <sub>2</sub> O)	+7.7 to +8.5 Degree	+8.0 Degree	Ch.P2020
Chloride (Cl)	≤ 0.02%	0.02%	Ch.P2020
pH	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.		