



Certificate of Analysis

Product Name: **L-Theanine**
 CAS#: **3081-61-6**
 Molecular Formula: **C₇H₁₄N₂O₃**
 Molecular Weight: **174.2**
 Country of Origin: **China**
 Batch Number: **20150913**
 Manufacture Date: **September 13, 2015**
 Test Date: **December 21, 2015**
 Retest Date: **December 20, 2017**

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
L-Theanine (HPLC)	98.0-102.0%	98.00%
Identification (ATR FT-IR)	Positive	Confirmed
Aerobic Plate Count	<1000 cfu/g	15 cfu/g
Yeast & Mold	Not more than 100 cfu/g	Not Detected
Coliforms	Report Only	Not Detected
<i>E. Coli</i>	≤30 MPN/100h	Absent
<i>Salmonella</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
<i>Pseudo. aeruginosa</i>	Negative	Absent
Conclusion (PureBulk):	This products conforms to USP standards	

The following information is an indirect translation of information provided from the Manufacturer's Certificate of Analysis, and should not be used solely as an instrument for strict quality control.

ITEMS	SPECIFICATIONS	RESULTS
Appearance	White crystalline powder	Conforms
pH	5.0-6.0	5.8
Particle Size	90% through 80 mesh	90% through 80 mesh
Bulk Density	>0.2 g/ml	0.37 g/ml
Solubility (1 g in 20 ml water)	Clear Colorless	Conforms
Melting Point	200°C to 210°C	202°C
Specific Rotation	+7.5° to +8.5°	+8.1°
Moisture	Not more than 1.0%	0.39%
Residue on Ignition	Not more than 0.2%	0.07%
Chloride (Cl)	Not more than 0.02%	0.018%
Iron (Fe)	Not more than 10 ppm	6 ppm
Heavy Metals	Not more than 10 ppm	7 ppm
Arsenic (As)	Not more than 1 ppm	<1 ppm
Cadmium (Cd)	Not more than 1 ppm	Conforms
Lead (Pb)	Not more than 2 ppm	Conforms
Mercury (Hg)	Not more than 1 ppm	Conforms
Conclusion (Manufacturer):	This products conforms to enterprise standards	

Storage Conditions: **Keep in sealed container under 25°C.**
Keep away from strong light, heat and moisture.

Purebulk.Inc verifies that the information contained herein is true and correct to the best of our knowledge.

Verified By: Bridgette Malone / Candace Gibson

(This document was produced electronically and is valid without signature.)