

Certificate of Analysis

Product Name: **L-Tryptophan**
 Country of Origin: **China**
 Carriers: **None**
 Batch Number: **Varies**
 Manufacture Date: **Varies**
 Retest Date: **Varies**

Test Results Obtained by PureBulk

ITEMS	SPECIFICATIONS	RESULTS
Assay	98.5-101.5%	99.56% as is basis
Aerobic Plate Count	≤1000 cfu/g	<10 cfu/g
Coliforms	≤100 cfu/g	<10 cfu/g
<i>E. Coli</i>	Negative	Absent
<i>Staph aureus</i>	Negative	Absent
Yeast & Mold	≤100 cfu/g	<10 cfu/g
<i>Salmonella</i>	Negative	Absent
<i>Pseudo. aeruginosa</i>	Negative	Absent
Conclusion (PureBulk):	This product conforms to 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 crystals or yellowish crystals or crystalline powder	White crystalline powder
Identification	Meet the requirements	Conforms
Specific Optical Rotation	-29.4° ~ -32.8°	-30.7°
pH	5.5-7.0	5.78
Chloride (Cl)	≤0.05%	<0.05%
Sulfate (SO4)	≤0.03%	<0.03%
Heavy Metals	≤15 ppm	<15 ppm
Iron (Fe)	≤30 ppm	<30 ppm
Residual Solvents	None	None
Loss on Drying	≤0.30%	0.06%
Residue on Ignition	≤0.1%	0.05%
Arsenic (As)	≤1 ppm	<1 ppm
Lead (Pb)	≤1 ppm	<1 ppm
Cadmium (Cd)	≤1 ppm	<1 ppm
Mercury (Hg)	≤0.1 ppm	<0.1 ppm
Conclusion (Manufacturer):	This product conforms to USP32 standards	

Additional Information: Gluten Free || Allergen free || BSE-TSE Free || Vegan

GMO Statement: Non-GMO

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: Candace Gibson

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