

# BaseBulk

## CERTIFICATE OF ANALYSIS

<b>Product Name:</b>	L-Tryptophan
<b>Batch Number:</b>	202407052
<b>CAS No.:</b>	73-22-3
<b>Manufacture Date:</b>	2024-07-05
<b>Expiry Date:</b>	2027-07-04

### Physical & Chemical Characteristics

Analysis Item	Specification	Result
Appearance	White crystals or crystalline powder	White crystalline powder
Identification	Conforms to standard spectrum	Conforms
Assay	98.5% ~ 101.5%	99.40%
Specific Optical Rotation [α] <sub>D20</sub>	-29.7° ~ -32.7°	-30.8°
pH	5.5 ~ 7.0	5.97
Chloride (Cl)	<0.05%	<0.05%
Sulfate (SO <sub>4</sub> )	<0.03%	<0.03%
Organic Volatile Impurities	Meets the requirements	Conforms

### Heavy Metals & Impurities

Analysis Item	Specification	Result
Heavy Metals (as Pb)	<15 ppm	<15 ppm
Iron (as Fe)	<30 ppm	<30 ppm
Lead	<1 ppm	<1 ppm
Mercury	<1 ppm	<1 ppm
Cadmium	<0.5 ppm	<0.5 ppm
Arsenic	<1 ppm	<1 ppm

### Additional Characteristics

Analysis Item	Specification	Result
Loss on Drying	<0.3%	0.06%
Residue on Ignition	<0.1%	0.05%

**Microbiological Tests**

Analysis Item	Specification	Result
Total Plate Count	<1000 cfu/g	<1000 cfu/g
Yeast & Mold	<100 cfu/g	<100 cfu/g
Salmonella	Negative	Conforms
Staphylococcus Aureus	Negative	Conforms
Enterobacteriaceae	<10 cfu/g	<10 cfu/g

**Conclusion**

This batch is conforming with the standard of USP30.

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