



Certificate of Analysis

Product Name: L-Tryptophan
Cat #: T-115
CAS #: 73-22-3
Lot #: Lot Specific
Retest Date[†]: Lot Specific
Storage: Store at room temperature.

Test	Specs	Results
Color	white to light yellow	Complies
Form	crystalline powder	Complies
Color of Solution (1% in 1 mol/L HCl)	colorless to almost colorless	Complies
Turbidity (1% in 1 mol/L HCl)	≤4.0 NTU	Complies
Water Content (K. Fischer)	≤0.3%	Complies
Loss on Drying (105°C, 3 h)	≤0.3%	Complies
Purity (HPLC)	≥98.0 area-%	Complies
Perchloric Acid Titration (0.1 mol/L)	98.5 to 101.5%	100.2%
pH-Value (1% in water)	5.5 to 7.0	Complies
Specific Optical Rotation [alpha] _D (c = 1 in water, 20°C)	-32.8 to -29.4	Complies
Sulfated Ash	≤0.1%	Complies
Iron Traces (tested with visicolor® test kit)	≤30 mg/kg	Complies

* GOLD BIOTECHNOLOGY, INC. provides this Certificate of Analysis in good faith. No representation is made as to the accuracy or comprehensiveness of the data and GOLD BIOTECHNOLOGY, INC. shall not be liable for any errors in the data. No representation is made as to the fitness of the data or of the materials for any particular use. User shall exercise its own raw material quality control, including analysis of the material, and shall independently determine the fitness of the data and the material for any use. No representation or warranty is made as to the effectiveness of the material or results obtained using the material, including damages or injury. GOLD BIOTECHNOLOGY, INC. liability is limited to the cost of the material. User assumes all responsibility for compliance with all laws and regulations implicated by use of this material.

† If provided, the Certificate of Analysis (COA) retest date corresponds to the recommended storage conditions provided on the COA. If no retest date is shown, the shelf-life for products is 2 years after purchase when stored according to COA recommendations. Retest dates are not rigid, and often only serve an informational purpose. COA retest dates are supplied by the manufacturer; however, GoldBio product labels may contain different storage recommendations to extend the life of the product beyond the manufacturer retest date or 2 years from purchase.

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Test	Specs	Results
Heavy Metals as Pb (color reaction with thioacetamide)	≤10 mg/kg	Complies
Chloride Traces (IC)	≤500 mg/kg	Complies
Sulfate Traces (IC)	≤300 mg/kg	Complies
FT-IR Spectrum	corresponds to reference spectrum	Complies

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