

Certificate of Analysis

Date of Testing: 2023-03-24 01:56:27

Date of Next Testing: 2027-03-23 01:56:27

Product Name: **L-Glutamine**

CAS Number: 56-85-9

Specifications & Purity: 99%

Lot #: C23181102

SKU #: **G105425**

Analysis: **192912**

Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Ammonia (NH3)	0-0.2 (%)	0.00 %
Carbon by Elemental Analysis	40.3-41.9 (%)	41.00 %
Nitrogen by Elemental Analysis	18.8-19.6 (%)	19.18 %
Purity(HPLC)	99-100 (%)	99.52400 %
Specific Rotation [α] ₂₀ /D(c=4 in H ₂ O)	6.3-7.3 (°)	6.31 °
Appearance (G105425)	White to Off-White Powder	White to Off-White Powder
Solubility in 1 M HCl , Colorless, Clear to Slightly Hazy, 50 mg/ml	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager