

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-11-27 14:02:31
Date of Next Testing: 2027-11-26 14:02:31
Product Name: **L-Glutamine**
CAS Number: 56-85-9
Specifications & Purity: 99%
Lot #: K2320155
SKU #: **G105425**
Analysis: **290437**
Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Carbon by Elemental Analysis	40.3-41.9 (%)	40.88 %
Nitrogen by Elemental Analysis	18.8-19.6 (%)	19.05 %
Purity(HPLC)	99-100 (%)	99.01100 %
Ammonia (NH ₃)	0-0.2 (%)	0.20 %
Specific Rotation [α] ₂₀ /D(c=4 in H ₂ O)	6.3-7.3 (°)	6.36 °
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