

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-05-30 15:57:45  
Date of Next Testing: 2028-05-29 15:57:45  
Product Name: **L-Glutamine**  
CAS Number: 56-85-9  
Specifications & Purity: 99%  
Lot #: E2422364  
SKU #: **G105425**  
Version: **0**  
Analysis #: **356206**  
Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Specific Rotation [α] <sub>20</sub> /D(c=4 in H <sub>2</sub> O)	6.3-7.3 (°)	6.63°
Carbon by Elemental Analysis	40.3-41.9 (%)	40.88%
Nitrogen by Elemental Analysis	18.8-19.6 (%)	19.11%
Purity(HPLC)	99-100 (%)	99.75200%
Ammonia (NH <sub>3</sub> )	0-0.2 (%)	0.20%
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