

## Certificate of Analysis

Date of Testing: 2022-02-24 13:02:13  
Date of Next Testing: 2026-02-23 13:02:13  
Product Name: **L-Glutamine**  
CAS Number: 56-85-9  
Specifications & Purity: 99%  
Lot #: B2222455  
SKU #: **G105425**  
**Analysis:** **067371**  
Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D(c=4 \text{ in H}_2\text{O})}$	6.3-7.3 (°)	6.32°
Ammonia (NH <sub>3</sub> )	0-0.2 (%)	0.00%
Carbon by Elemental Analysis	40.3-41.9 (%)	41.44%
Nitrogen by Elemental Analysis	18.8-19.6 (%)	19.19%
Purity(HPLC)	99-100 (%)	99.75500%
Appearance (G105425)	White to Off-White Powder	White to Off-White Powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in 1 M HCl , Colorless, Clear to Slightly Hazy, 50 mg/ml	pass	Pass



John Su  
QA & QC Manager