

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-04-12 11:19:16
 Date of Next Testing: 2028-04-11 11:19:16
 Product Name: **L-Glutamic acid hydrochloride**
 CAS Number: 138-15-8
 Specifications & Purity: $\geq 98\%$
 Lot #: D2407313
 SKU #: **G113196**
 Version: **0**
 Analysis #: **329751**
 Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D(c=6 \text{ in H}_2\text{O})}$	22-25 (°)	23.62°
Purity(HPLC)	98-100 (%)	99.39500%
Purity(Neutralization titration)	97.5-102.5 (%)	99.99%
Carbon by Elemental Analysis	31.9-33 (%)	32.62%
Nitrogen by Elemental Analysis	7.3-7.9 (%)	7.65%
Infrared spectrum	Conforms to Structure	Conforms to Structure
Appearance (G113196)	White powder	White powder
Solubility in H ₂ O , Colorless ,Clear ,50 mg/mL in H ₂ O	pass	Pass



John Su
QA & QC Manager