

Certificate of Analysis

Date of Testing: 2024-10-14 10:45:50

Date of Next Testing: 2028-10-13 10:45:50

Product Name: **L-Glutamic acid hydrochloride**

CAS Number: 138-15-8

Specifications & Purity: $\geq 98\%$

Lot #: L2031131

SKU #: **G113196**

Version: **0**

Analysis #: **419167**

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	98.04000 %
Purity(Neutralization titration)	97.5-102.5 (%)	98.15 %
Carbon by Elemental Analysis	31.9-33 (%)	32.98 %
Specific Rotation $[\alpha]_{20/D}(c=6 \text{ in H}_2\text{O})$	22-25 (°)	23.41 °
Nitrogen by Elemental Analysis	7.3-7.9 (%)	7.32 %
Appearance (G113196)	White powder	White powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , Colorless ,Clear ,50 mg/mL in H ₂ O	pass	Pass



John Su
QA & QC Manager