

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-07-21 18:36:16
 Date of Next Testing: 2027-07-20 18:36:16
 Product Name: **L-Glutamic acid diethyl ester hydrochloride**
 CAS Number: 1118-89-4
 Specifications & Purity: $\geq 97\%$
 Lot #: G2318178
 SKU #: **G116982**
 Version: **0**
 Analysis #: **024274**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(HPLC)	97-100 (%)	98.04500 %
Purity(Titration by AgNO ₃)	96.5-103.5 (%)	101.12000 %
Specific Rotation [α] _{20/D} (c=3.6 in EtOH)	21-24 (°)	22.01400 °
Melting point	108-117 (°C)	108.63000 °C
Appearance (G116982)	white to off-white powder, crystals and/or chunks	white to off-white powder, crystals and/or chunks
Proton NMR 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