

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-07-25 15:15:21  
Date of Next Testing: 2028-07-24 15:15:21  
Product Name: **L-Proline**  
CAS Number: 147-85-3  
Specifications & Purity:  $\geq 99\%$   
Lot #: G2418660  
SKU #: **P108709**  
Version: **2**  
Analysis #: **381708**  
Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	11.9-12.5 (%)	12.00 %
Ignition Residue	0-0.1 (%)	0.02 %
Carbon by Elemental Analysis	51.1-53.2 (%)	51.30 %
PH	5.9-6.9	6.10
Purity(Nonaqueous Titration)	98.5-101.5 (%)	98.90 %
Loss on drying	0-0.3 (%)	0.10 %
Purity(HPLC)(CAD)	99-100 (%)	99.77 %
Specific Rotation $[\alpha]_{20/D(c=4 \text{ in H}_2\text{O})}$	-86--84 ( $^{\circ}$ )	-84.30 $^{\circ}$
Appearance (P108709)	white crystals or crystalline powder or powder	white crystals or crystalline powder or powder
Solubility in H <sub>2</sub> O , Colorless ,Clear ,50 mg/mL in H <sub>2</sub> O	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager