

Certificate of Analysis

Date of Testing: 2025-01-20 11:53:58

Date of Next Testing: 2029-01-19 11:53:58

Product Name: **L-Proline**

CAS Number: 147-85-3

Specifications & Purity: $\geq 99\%$

Lot #: A2513432

SKU #: **P108709**

Version: **2**

Analysis #: **449438**

Storage Temperature: Protected from light, Room temperature

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	11.9-12.5 (%)	12.06 %
Ignition Residue	0-0.1 (%)	0.00 %
Carbon by Elemental Analysis	51.1-53.2 (%)	52.20 %
PH	5.9-6.9	6.33
Purity(Nonaqueous Titration)	98.5-101.5 (%)	99.28 %
Loss on drying	0-0.3 (%)	0.04 %
Purity(HPLC)(CAD)	99-100 (%)	99.62 %
Specific Rotation $[\alpha]_{20/D(c=4 \text{ in H}_2\text{O})}$	-86--84 (°)	-84.10°
Appearance (P108709)	white crystals or crystalline powder or powder	white crystals or crystalline powder or powder
Solubility in H ₂ O , Colorless ,Clear ,50 mg/mL in H ₂ O	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager