

## Certificate of Analysis

Date of Testing: 2023-07-25 14:01:42  
Date of Next Testing: 2027-07-24 14:01:42  
Product Name: **DL-Proline**  
CAS Number: 609-36-9  
Specifications & Purity: 99%  
Lot #: G2314187  
SKU #: **P105590**  
Version: **1**  
Analysis #: **120437**

Parameter	Limit Values	Result
Specific Rotation [a] <sub>D</sub> (c=4 in H <sub>2</sub> O)	-1-1 (°)	0.04°
Purity (T)	98.5-101.5 (%)	99.75 %
Appearance (P105590)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , Colorless to Faint Yellow, Clear to pass Hazy, 20%		Pass



John Su  
QA & QC Manager