

## Certificate of Analysis

Date of Testing: 2023-02-11 09:54:47

Date of Next Testing: 2027-02-10 09:54:47

Product Name: **D-Proline**

CAS Number: 344-25-2

Specifications & Purity: 99%

Lot #: B2306124

SKU #: **P111001**

**Analysis:** **179332**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	11.9-12.5 (%)	12.18 %
Carbon by Elemental Analysis	51.6-52.7 (%)	51.98 %
Specific Rotation [α] <sub>20</sub> /D(c=4 in H <sub>2</sub> O)	83-87 (°)	83.01°
Purity(Titration by HClO <sub>4</sub> )	99-101 (%)	99.01 %
Appearance (P111001)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Solubility in H <sub>2</sub> O , Colorless to Very Faint Yellow Clear(5%)	pass	Pass
Proton NMR spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager