

Certificate of Analysis

Date of Testing: 2023-01-16 14:06:45

Date of Next Testing: 2027-01-15 14:06:45

Product Name: **L-Serine**

CAS Number: 56-45-1

Specifications & Purity: 99%

Lot #: A2310230

SKU #: **S103483**

Analysis: **179421**

Storage Temperature: Desiccated

Parameter	Limit Values	Result
Carbon by Elemental Analysis	33.6-35 (%)	34.60 %
Nitrogen by Elemental Analysis	13-13.6 (%)	13.50 %
Purity(HPLC)	99-100 (%)	99.41000 %
Specific rotation(20°C, C = 10 in 2 M HCl, EP)	14.4-15.5 (°)	14.71000 °
Appearance (S103483)	White to Off-White Powder	White to Off-White Powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , Colorless and clear,50 mg/mL	pass	Pass



John Su
QA & QC Manager