

Certificate of Analysis

Date of Testing: 2022-03-31 17:40:06

Date of Next Testing: 2026-03-30 17:40:06

Product Name: **L-Serine**

CAS Number: 56-45-1

Specifications & Purity: 99%

Lot #: E1809101

SKU #: **S103483**

Analysis: **085978**

Storage Temperature: Desiccated

Parameter	Limit Values	Result
Carbon by Elemental Analysis	33.6-35 (%)	33.80 %
Nitrogen by Elemental Analysis	13-13.6 (%)	13.40 %
Purity(HPLC)	99-100 (%)	99.20000 %
Specific Rotation $[\alpha]_{20/D}(C=2, 5N HCl)$	12°-14°	12.90000 °
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