

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-03-13 20:43:17
 Date of Next Testing: 2025-03-12 20:43:17
 Product Name: **N-Z-L-serine methyl ester**
 CAS Number: 1676-81-9
 Specifications & Purity: $\geq 95\%$
 Lot #: C23081396
 SKU #: **I132671**
 Version: **0**
 Analysis #: **154679**
 Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Melting point	35-40 (°C)	36.50000 °C
Carbon by Elemental Analysis	53.5-60.3 (%)	55.20000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in MeOH})$	-17--12 (°)	-16.32600 °
Nitrogen by Elemental Analysis	5.1-5.9 (%)	5.40000 %
Purity(HPLC)	95-100 (%)	99.69400 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in MeOH	almost transparency	almost transparency
Appearance (I132671)	Colorless to white to Yellow Powder or Solid or Liquid	Colorless to white to Yellow Powder or Solid or Liquid



John Su
QA & QC Manager