

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-05-18 10:42:03

Date of Next Testing: 2027-05-17 10:42:03

Product Name: **Z-L-Alanine**

CAS Number: 1142-20-7

Specifications &amp; Purity: 98%

Lot #: E2309050

SKU #: **Z108996****Analysis: 035610**

Parameter	Limit Values	Result
Purity (Titration by NaOH)	97.5-102.5 (%)	99.50%
Specific Rotation [ $\alpha$ ] <sub>20</sub> /D(c=2 in AcOH)	-16--13 (°)	-14.14°
Melting point	82-87 (°C)	86.62000 °C
Purity(HPLC)	98-100 (%)	98.23000%
Appearance (Z108996)	White to Off-White Powder or Solid or Chunks	White to Off-White Powder or Solid or Chunks
Proton NMR spectrum	Conforms to structure	Conforms to Structure

John Su  
QA & QC Manager