

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-03-04 11:14:58  
 Date of Next Testing: 2026-03-03 11:14:58  
 Product Name: **L-(+)-Lysine Monohydrochloride**  
 CAS Number: 657-27-2  
 Specifications & Purity: 99%  
 Lot #: B2226648  
 SKU #: **L105432**  
**Analysis:** **079929**  
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Loss on drying	0-0.3 (%)	0.25 %
Heavy metal (as Pb)	0-10 (ppm)	8.23 ppm
Iron(Fe)	0-30 (ppm)	2.60 ppm
Sulfate(SO42-)	0-200 (ppm)	20.56 ppm
Purity(as dry basis)	99-101 (%)	99.96 %
Transmission(c=10, H2O, 430 nm, 1 cm cell)	95-100 (%)	98.23 %
Sulfate Ash	0-0.1 (%)	0.08 %
Ammonia (NH4)	0-200 (ppm)	23.50 ppm
Melting point	263-264 (°C)	263.96000 °C
Other amino acids(TLC)	0-0.5 (%)	0.33 %
(As)Arsenic	0-1 (ppm)	0.06 ppm
Specific Rotation [α] <sub>20</sub> /D(c=8 in 6N HCl)	20.5-21.5 (°)	20.56 °
Appearance (L105432)	White to Off-White Powder or Solid or Chunks	White to Off-White Powder or Solid or Chunks
Infrared spectrum	Conforms to Structure	Conforms to Structure



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A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager