

## Certificate of Analysis

Date of Testing: 2023-07-06 11:03:12

Date of Next Testing: 2027-07-05 11:03:12

Product Name: **L-Alanine**

CAS Number: 56-41-7

Specifications & Purity: 99%

Lot #: F2328201

SKU #: **A108263**

**Analysis:** **238696**

Storage Temperature: Desiccated

Parameter	Limit Values	Result
Lead(Pb)	0-10 (ppm)	3.66 ppm
Mercury(Hg)	0-1 (ppm)	0.25 ppm
Cadmium(Cd)	0-1 (ppm)	0.60 ppm
Purity(NonaqueousTitration)afterdrying	99-101 (%)	99.90%
Carbon by Elemental Analysis	40-41 (%)	40.37%
(As)Arsenic	0-3 (ppm)	1.20 ppm
Specific Rotation [a] <sub>D</sub> 20/D(c=10 in HCl)(after drying)	13.2-15 (°)	14.49°
Nitrogen by Elemental Analysis	15.2-16.2 (%)	15.73%
Appearance (A108263)	white powder and/or chunks	white powder and/or chunks
Solubility in H <sub>2</sub> O	Almost transparency	almost transparency
Infrared spectrum	Conforms to Structure	Conforms to Structure



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QA & QC Manager