

Certificate of Analysis

Date of Testing: 2024-12-06 14:45:11

Date of Next Testing: 2028-12-05 14:45:11

Product Name: **L-Arginine hydrochloride**

CAS Number: 1119-34-2

Specifications & Purity: $\geq 99\%$

Lot #: L2404065

SKU #: **A103486**

Version: **4**

Analysis #: **189873**

Storage Temperature: Argon charged, Desiccated

Parameter	Limit Values	Result
Copper(Cu)	0-0.0005 (%)	0.00 %
Sodium(Na)	0-0.005 (%)	0.00 %
(Pb)Lead	0-0.001 (%)	0.00 %
Zinc(Zn)	0-0.0005 (%)	0.00 %
Insoluble matter	0-0.1 (%)	0.03 %
Aluminum(Al)	0-0.0005 (ppm)	0.00 ppm
Sulfate(SO ₄ ²⁻)	0-0.05 (ppm)	0.02 ppm
Ammonia (NH ₄)	0-0.05 (%)	0.01 %
PH(20 °C, 1 M in Water)	5-7	6.70
Iron(Fe)	0-0.0005 (%)	0.00 %
Potassium(K)	0-0.005 (%)	0.00 %
Calcium(Ca)	0-0.0005 (ppm)	0.00 ppm
Magnesium(Mg)	0-0.0005 (ppm)	0.00 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.04 %
Phosphorus (P)	0-0.0005 (%)	0.00 %
Assay(Nonaqueous Titration)	98.5-101.5 (%)	98.78000 %
Specific Rotation [α] ₂₀ /D(c=8 in 6M HCl)	21.4-23.6 (°)	21.41 °
Appearance (A103486)	White Powder or Crystals	White Powder or Crystals
Solubility in H ₂ O , colorless to pale yellow liquid, clear, 1M, 20 °C	pass	Pass
λ, 1 M in H ₂ O	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

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

John Su
QA & QC Manager