

ALADDIN SCIENTIFIC CORPORATION  
 14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-12-22 17:23:24  
 Date of Next Testing: 2029-12-21 17:23:24  
 Product Name: **L-Arginine hydrochloride**  
 CAS Number: 1119-34-2  
 Specifications & Purity: PharmPure™, USP, JP, Ph.Eur., for cell culture, ≥98.5%  
 Lot #: L2518625  
 SKU #: **A103485**  
 Version: **1**  
 Analysis #: **616873**  
 Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated, Cool

Parameter	Limit Values	Result
Loss on drying	0-0.2 (%)	0.00000 %
Heavy metal (as Pb)	0-10 (ppm)	0.00000 ppm
Iron(Fe)	0-10 (ppm)	0.00000 ppm
Endotoxin Assay	0-1 (EU/mg)	0.02310 EU/mg
PH test(1.0g in 10ml water)	4.7-6.2	4.96000
(As)Arsenic	0-1 (ppm)	0.00000 ppm
Ammonia (NH4)	0-0.02 (%)	0.02000 %
Ignition Residue (as sulfate)	0-0.1 (%)	0.10000 %
Purity(titration with AgNO3)(dry basis)	98.5-100 (%)	98.51000 %
Sulfate(SO42-)	0-0.02 (%)	0.02000 %
Specific Rotation [α] <sub>20</sub> /D(c=8 in 6M HCl)	22.1-22.9 (°)	22.18300°
Appearance (A103485)	white crystalline powder	white crystalline powder
Solubility in H2O , Colorless , Clear , 100 mg in 1 mL H2O	pass	Pass
Cell Culture Test	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Ninhydrin-positive substances (other amino acids)	Conforms	Conforms
Origin	non-animal source	non-animal source
Residual solvents	complies	complies



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su  
QA & QC Manager