

Certificate of Analysis

Date of Testing: 2023-02-09 09:22:39
 Date of Next Testing: 2027-02-08 09:22:39
 Product Name: **L-Arginine hydrochloride**
 CAS Number: 1119-34-2
 Specifications & Purity: EP,JP,USP grade, ≥98.5%, for cell culture
 Lot #: B2301186
 SKU #: **A103485**
Analysis: **142846**
 Storage Temperature: Desiccated

Parameter	Limit Values	Result
Ammonia (NH ₄)	0-0.02 (%)	0.00 %
Heavy metal (as Pb)	0-10 (ppm)	2.00 ppm
Iron(Fe)	0-10 (ppm)	2.00 ppm
Ignition Residue (as sulfate)	0-0.1 (%)	0.05 %
Endotoxin Assay	0-1 (EU/mg)	0.80 EU/mg
Sulfate(SO ₄ ²⁻)	0-0.02 (%)	0.01 %
PH test(1.0g in 10ml water)	4.7-6.2	5.22
Loss on drying	0-0.2 (%)	0.20 %
Purity(titration with AgNO ₃)(dry basis)	98.5-100 (%)	99.15 %
Specific Rotation [α] _D ²⁰ (c=8 in 6M HCl)	22.1-22.9 (°)	22.11°
(As)Arsenic	0-1 (ppm)	0.00 ppm
Appearance (A103485)	white crystalline powder	white crystalline powder
Cell Culture Test	pass	Pass
Ninhydrin-positive substances (other amino acids)	Conforms	Conforms
Origin	non-animal source	non-animal source
Residual solvents	complies	complies
Solubility in H ₂ O, Colorless, Clear, 100 mg in 1 mL H ₂ O	pass	Pass
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