

Certificate of Analysis

Date of Testing: 2025-04-15 09:00:13

Date of Next Testing: 2029-04-14 09:00:13

Product Name: **L-Cysteine hydrochloride monohydrate**

CAS Number: 7048-04-6

Specifications & Purity: Animal Free, USP, Ph.Eur., for cell culture, PharmPure™

Lot #: D2503356

SKU #: **C118575**

Version: **0**

Analysis #: **472559**

Storage Temperature: Protected from light, Argon charged

Parameter	Limit Values	Result
Ignition Residue	0-0.1 (%)	0.00 %
Sulfate(SO42-)	0-0.02 (%)	0.02 %
Loss on drying	8.5-12 (%)	8.93 %
Iron(Fe)	0-10 (ppm)	0.00 ppm
Specific Rotation [α] ₂₀ /D(c=8 in 1 M HCl)	6.1-7.8 (°)	6.24 °
Ammonia (NH ₄)	0-0.02 (%)	0.00 %
PH(1% in Water)	1.5-2	1.66
Heavy metal (as Pb)	0-10 (ppm)	0.00 ppm
Purity(titration with AgNO ₃)(dry basis)	98.5-101 (%)	100.98 %
Chloride (Cl ⁻)	19.89-20.29 (%)	19.89 %
Endotoxin Assay	0-1 (EU/mg)	0.04 EU/mg
Appearance (C118575)	White Crystals, Powder or Crystalline	White Crystals, Powder or Crystalline
	Solid	Solid
Solubility in H ₂ O , Colorless Clear 100 mg/ml	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



ALADDIN SCIENTIFIC CORPORATION

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

John Su
QA & QC Manager