

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-03-05 15:29:15
 Date of Next Testing: 2027-03-05 15:29:15
 Product Name: **L-Proline**
 CAS Number: 147-85-3
 Specifications & Purity: Ultra pure biological reagent grade, 99.5%
 Lot #: B2421602
 SKU #: **L476193**
Analysis: **327165**
 Storage Temperature: Protected from light

Parameter	Limit Values	Result
Purity(HPLC area)	99.5-100 (%)	99.90 %
Specific Rotation [α] ₂₀ /D(c=4 in H ₂ O)	-86~-84 (°)	-84.57 °
Chloride(Cl ⁻)	0-100 (ppm)	0.00 ppm
Sulfate(SO ₄ ²⁻)	0-100 (ppm)	0.00 ppm
Ammonium(NH ₄)	0-20 (ppm)	0.00000 ppm
Aluminum(Al)	0-5 (ppm)	0.00 ppm
Arsenic(As)	0-0.1 (ppm)	0.00000 ppm
Barium(Ba)	0-5 (ppm)	0.00 ppm
Bismuth(Bi)	0-5 (ppm)	0.00 ppm
Calcium(Ca)	0-10 (ppm)	0.00 ppm
Cadmium(Cd)	0-5 (ppm)	0.00 ppm
Cobalt(Co)	0-5 (ppm)	0.00 ppm
Chromium(Cr)	0-5 (ppm)	0.00 ppm
Copper(Cu)	0-5 (ppm)	0.00 ppm
Iron(Fe)	0-5 (ppm)	0.00 ppm
Potassium(K)	0-50 (ppm)	0.00 ppm
Lithium(Li)	0-5 (ppm)	0.00 ppm
Magnesium(Mg)	0-5 (ppm)	0.00 ppm
Manganese(Mn)	0-5 (ppm)	0.00 ppm
Molybdenum(Mo)	0-5 (ppm)	0.00 ppm
Sodium(Na)	0-50 (ppm)	0.00 ppm
Nickel(Ni)	0-5 (ppm)	0.00 ppm
Lead(Pb)	0-5 (ppm)	0.00 ppm
Strontium(Sr)	0-5 (ppm)	0.00 ppm
Zinc(Zn)	0-5 (ppm)	0.00 ppm
Ignition Residue	0-0.1 (%)	0.00 %

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Parameter	Limit Values	Result
Appearance(L476193)	White powder to crystal	White powder to crystal
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O,clear colorless,1g/10 ml in water	Pass	Pass

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

John Su
QA & QC Manager