

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-12-16 16:37:40
Date of Next Testing: 2028-12-15 16:37:40
Product Name: **L-(+)-Tartaric acid**
CAS Number: 87-69-4
Specifications & Purity: $\geq 99\%$
Lot #: L2413312
SKU #: **T112459**
Version: **1**
Analysis #: **058508**
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Loss on drying	0-0.5 (%)	0.21000 %
Purity(Neutralization titration)	98.5-101.5 (%)	100.59000 %
Sulfate(SO ₄ ²⁻)	0-150 (ppm)	70.50000 ppm
Chloride (Cl ⁻)	0-100 (ppm)	83.60000 ppm
Heavy metal (as Pb)	0-10 (ppm)	4.90000 ppm
Calcium(Ca)	0-200 (ppm)	141.50000 ppm
Specific Rotation [α] _D ²⁰ (c=20 in H ₂ O)	12-13 (°)	12.01000 °
Sulfate Ash	0-0.1 (%)	0.00640 %
Melting point	168-172 (°C)	170.05000 °C
Appearance (T112459)	White to Off-White Powder, Crystals or Granules	White to Off-White Powder, Crystals or Granules
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O	Almost transparency	almost transparency



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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