

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2024-05-23 14:39:39
Date of Next Testing:	2028-05-22 14:39:39
Product Name:	<b>L-(+)-Tartaric acid</b>
CAS Number:	87-69-4
Specifications & Purity:	≥99%
Lot #:	E2414023
SKU #	<b>T112459</b>
Version	<b>0</b>
<b>Analysis #:</b>	<b>058508</b>
Storage Temperature:	Room temperature

Parameter	Limit Values	Result
Loss on drying	0-0.5 (%)	0.21 %
Purity(Neutralization titration)	98.5-101.5 (%)	100.59 %
Sulfate(SO42-)	0-150 (ppm)	70.50 ppm
Chloride (Cl-)	0-100 (ppm)	83.60 ppm
Heavy metal (as Pb)	0-10 (ppm)	4.90 ppm
Calcium(Ca)	0-200 (ppm)	141.50 ppm
Specific Rotation [α] <sub>20</sub> /D(c=20 in H <sub>2</sub> O)	12-13 (°)	12.01 °
Sulfate Ash	0-0.1 (%)	0.01 %
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 <sub>2</sub> 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