

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing:	2022-08-08 09:47:01
Date of Next Testing:	2026-08-07 09:47:01
Product Name:	L-(+)-Tartaric acid
CAS Number:	87-69-4
Specifications & Purity:	ACS, ≥99.5%
Lot #:	11830049
SKU #	T112460
Analysis:	122026
Storage Temperature:	Room temperature

Parameter	Limit Values	Result
Ignition Residue (as sulfate)	0-0.02 (%)	0.01 %
Iron(Fe)	0-5 (ppm)	2.21 ppm
Insoluble matter in H ₂ O	0-0.005 (%)	0.00 %
Phosphate(PO ₄)	0-10 (ppm)	4.36 ppm
Chloride (Cl ⁻)	0-10 (ppm)	5.26 ppm
Purity (Titration by NaOH)	99.5-100.5 (%)	99.58 %
Sulfate(SO ₄ ²⁻)	0-0.002 (%)	0.00 %
Enantiometric Excess	98.5-100 (%)	98.61 %
Heavy metal (as Pb)	0-5 (ppm)	3.11 ppm
Specific Rotation [α] _D ²⁰ /D(c=20 in H ₂ O)	10.4-14.4 (°)	12.33°
Appearance (T112460)	white crystal or crystal powder	white crystal or crystal powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Oxalate(C ₂ O ₄) (limit 0.1%)	Pass	Pass



John Su
QA & QC Manager