

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2023-02-13 14:59:46
Date of Next Testing:	2027-02-12 14:59:46
Product Name:	<b>L-(+)-Tartaric acid</b>
CAS Number:	87-69-4
Specifications & Purity:	ACS, ≥99.5%
Lot #:	B2306938
SKU #	<b>T112460</b>
<b>Analysis:</b>	<b>187085</b>
Storage Temperature:	Room temperature

Parameter	Limit Values	Result
Ignition Residue (as sulfate)	0-0.02 (%)	0.01 %
Iron(Fe)	0-5 (ppm)	0.00 ppm
Insoluble matter in H <sub>2</sub> O	0-0.005 (%)	0.00 %
Phosphate(PO <sub>4</sub> )	0-10 (ppm)	4.00 ppm
Chloride (Cl <sup>-</sup> )	0-10 (ppm)	2.98 ppm
Purity (Titration by NaOH)	99.5-100.5 (%)	99.80 %
Sulfate(SO <sub>4</sub> <sup>2-</sup> )	0-0.002 (%)	0.00 %
Enantiometric Excess	98.5-100 (%)	98.51 %
Heavy metal (as Pb)	0-5 (ppm)	0.00 ppm
Specific Rotation [α] <sub>D</sub> <sup>20</sup> /D(c=20 in H <sub>2</sub> O)	10.4-14.4 (°)	12.91°
Appearance (T112460)	white crystal or crystal powder	white crystal or crystal powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Oxalate(C <sub>2</sub> O <sub>4</sub> ) (limit 0.1%)	Pass	Pass



John Su  
QA & QC Manager