

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-05-08 13:39:57
Date of Next Testing: 2027-05-08 13:39:57
Product Name: **L(+)-Tartaric acid**
CAS Number: 87-69-4
Specifications & Purity: Ph.Eur., Suitable for Analysis, ACS, Premium pure
Lot #: D2422134
SKU #: **L434307**
Version: **2**
Analysis #: **337275**
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific Rotation [α] ₂₀ /D(c=20 in H ₂ O)	12-13 (°)	12.14°
Chloride (Cl ⁻)	0-5 (ppm)	0.00 ppm
Phosphate(PO ₄)	0-10 (ppm)	0.00 ppm
Calcium(Ca)	0-20 (ppm)	0.00 ppm
Iron(Fe)	0-5 (ppm)	0.00 ppm
Heavy metal (as Pb)	0-5 (ppm)	0.00 ppm
Insoluble matter	0-50 (ppm)	0.00 ppm
Copper(Cu)	0-5 (ppm)	0.00 ppm
Lead(Pb)	0-5 (ppm)	0.00 ppm
Sulphated ash	0-100 (ppm)	0.00000 ppm
Loss on drying(105°C)	0-0.2 (%)	0.02 %
Assay(alkalimetric , calculated on dried substance)	99.5-101 (%)	99.67000 %
Sulfate(SO ₄ ²⁻)	0-50 (ppm)	0.00 ppm
Total Sulfur as SO ₄ (SO ₄)	0-20 (ppm)	0.00000 ppm
Oxalic acid	0-350 (ppm)	0.00000 ppm
NMR Spectrum 1H	Conforms to structure	Conforms to Structure
Appearance of solution(transparent)	pass	Pass



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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