

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-06-14 09:14:34

Date of Next Testing: 2029-06-13 09:14:34

Product Name: **L-(-)-Malic acid**

CAS Number: 97-67-6

Specifications & Purity: $\geq 98\%$

Lot #: F2512355

SKU #: **M105695**Version: **0**Analysis #: **521230**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Melting point	101-105 (°C)	103.96000 °C
Purity(Neutralization titration)	98-102 (%)	99.08 %
Specific Rotation $[\alpha]_{20/D}(c=8.5 \text{ in H}_2\text{O})$	-2.6--1.6 (°)	-1.93 °
Appearance (M105695)	White Powder or Crystals	White Powder or Crystals
Solubility in H ₂ O	Almost transparency	almost transparency
Infrared spectrum	Conforms to Structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".John Su
QA & QC Manager