

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-09-16 15:25:50

Date of Next Testing: 2029-09-15 15:25:50

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

CAS Number: 97-67-6

Specifications & Purity:  $\geq 98\%$

Lot #: I2509332

SKU # **M105695**

Version **0**

**Analysis #:** **521230**

Storage Temperature: Room temperature, Argon charged, Desiccated, Cool

| Parameter                                                         | Limit Values             | Result                   |
|-------------------------------------------------------------------|--------------------------|--------------------------|
| Melting point                                                     | 101-105 (°C)             | 103.96000 °C             |
| Purity(Neutralization titration)                                  | 98-102 (%)               | 99.08000 %               |
| Specific Rotation $[\alpha]_{20/D}(c=8.5 \text{ in H}_2\text{O})$ | -2.6--1.6 (°)            | -1.93400 °               |
| Appearance (M105695)                                              | White Powder or Crystals | White Powder or Crystals |
| Solubility in H <sub>2</sub> O                                    | Almost transparency      | almost transparency      |
| Infrared spectrum                                                 | Conforms to Structure    | Conforms to Structure    |



John Su  
QA & QC Manager