

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-10-20 18:33:17  
 Date of Next Testing: 2029-10-19 18:33:17  
 Product Name: **DL-Malic acid**  
 CAS Number: 6915-15-7  
 Specifications & Purity: AR, ≥99%(T)  
 Lot #: J2516608  
 SKU #: **M101126**  
 Version: **0**  
 Analysis #: **563358**  
 Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated, Cool

| Parameter                                                                    | Limit Values                                    | Result                                          |
|------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Purity (Titration by NaOH)                                                   | 99-101 (%)                                      | 99.77000 %                                      |
| Specific Rotation [α] <sub>20/D</sub> (0.2g/mL in H <sub>2</sub> O)          | -0.1-0.1 (°)                                    | -0.02800 °                                      |
| Appearance (M101126)                                                         | White to Off-White Powder or Chunks or particle | White to Off-White Powder or Chunks or particle |
| Solubility in H <sub>2</sub> O , Colorless to Faint Yellow, Clear , 50 mg/ml | pass                                            | Pass                                            |
| Infrared spectrum                                                            | Conforms to Structure                           | Conforms to Structure                           |



John Su  
QA & QC Manager