

## Certificate of Analysis

Date of Testing: 2025-04-30 10:27:23

Date of Next Testing: 2029-04-29 10:27:23

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

CAS Number: 97-67-6

Specifications & Purity:  $\geq 98\%$

Lot #: D2529265

SKU # **M105695**

Version **0**

**Analysis #:** **503583**

Storage Temperature: Argon charged

| Parameter                                                         | Limit Values             | Result                   |
|-------------------------------------------------------------------|--------------------------|--------------------------|
| Melting point                                                     | 101-105 (°C)             | 104.65000 °C             |
| Purity(Neutralization titration)                                  | 98-102 (%)               | 99.42 %                  |
| Specific Rotation $[\alpha]_{20/D(c=8.5 \text{ in H}_2\text{O})}$ | -2.6--1.6 (°)            | -1.88 °                  |
| 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    |



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