

Certificate of Analysis

Date of Testing: 2023-01-16 13:07:08

Date of Next Testing: 2027-01-15 13:07:08

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

CAS Number: 97-67-6

Specifications & Purity: 98%

Lot #: A2305623

SKU #: **M105695**

Version: **0**

Analysis #: **159380**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(Neutralization titration)	98-102 (%)	99.46 %
Specific Rotation [α] ₂₀ /D(c=8.5 in H ₂ O)	-2.6--1.6 (°)	-2.11 °
Melting point	101-105 (°C)	104.90000 °C
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