

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-07-13 08:52:46  
Date of Next Testing: 2028-07-12 08:52:46  
Product Name: **Dimethyl L-(-)-Malate**  
CAS Number: 617-55-0  
Specifications & Purity: 98%  
Lot #: G2408192  
SKU #: **D102009**  
Version: **0**  
Analysis #: **344746**  
Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	98.25 %
Refractive index n <sub>20</sub> /D	1.4375-1.442	1.44
Specific Rotation [α] <sub>20</sub> /D	-8.5--5.5 (°)	-8.48 °
Appearance (D102009)	Colorless to light yellow liquid	Colorless to light yellow liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager