

Certificate of Analysis

Date of Testing: 2024-01-31 09:21:33

Date of Next Testing: 2026-01-30 09:21:33

Product Name: **Diethyl L-(-)-Malate**

CAS Number: 691-84-9

Specifications & Purity: $\geq 97.0\%$ (GC)

Lot #: A2426027

SKU #: **D136832**

Analysis: 252707

Parameter	Limit Values	Result
Density (20°C)	1.127-1.131	1.13
Refractive index n ₂₀ /D	1.433-1.437	1.44
Purity(GC)	97-100 (%)	99.26 %
Specific Rotation [α] ₂₀ /D(c=Neat)	-13--10 (°)	-11.69°
Appearance (D136832)	Colorless liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager