

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-09-24 15:19:17

Date of Next Testing: 2028-09-23 15:19:17

Product Name: **D-(+)-Apple Acid Diethyl Ester**

CAS Number: 7554-28-1

Grades & Purity: $\geq 98\%$ (GC)

Lot #: L2418193

SKU #: **D134433**

Version: **0**

Analysis #: **784133**

Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in EtOH})$	10-13 (°)	11.90300°
Refractive index $n_{20/D}$	1.433-1.437	1.43480
Purity(GC)	98-100 (%)	99.29100 %
Density (20°C)	1.127-1.131	1.12870
Appearance (D134433)	Colorless to light yellow liquid	Colorless to light yellow liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager