

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-05-19 17:18:39

Date of Next Testing: 2029-05-18 17:18:39

Product Name: **DL-Apple Acid Diethyl Ester**

CAS Number: 7554-12-3

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

Lot #: E2515328

SKU #: **D155732**

Version: **0**

**Analysis #:** **497653**

Storage Temperature: Room temperature

| Parameter                           | Limit Values                     | Result                           |
|-------------------------------------|----------------------------------|----------------------------------|
| Purity(GC)                          | 98-100 (%)                       | 99.70000 %                       |
| Refractive index n <sub>20</sub> /D | 1.433-1.436                      | 1.43600                          |
| Density (20°C)                      | 1.127-1.13                       | 1.12710                          |
| Appearance (D155732)                | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Proton NMR spectrum                 | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager