

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-05-02 11:37:12

Date of Next Testing: 2026-05-01 11:37:12

Product Name: **Diethyl D-(-)-Tartrate**

CAS Number: 13811-71-7

Specifications & Purity:  $\geq 99\%$

Lot #: D2228035

SKU #: **D119332**

Version: **0**

Analysis #: **055690**

Storage Temperature: Room temperature

| Parameter                           | Limit Values                     | Result                           |
|-------------------------------------|----------------------------------|----------------------------------|
| Specific Rotation $[\alpha]_{20/D}$ | -8.1--7.5 (°)                    | -8.09880 °                       |
| Refractive index $n_{20/D}$         | 1.446-1.448                      | 1.44670                          |
| Specific gravity                    | 1.206-1.21                       | 1.20800                          |
| Purity(GC)                          | 99-100 (%)                       | 99.21300 %                       |
| Appearance (D119332)                | Colorless to light yellow liquid | Colorless to light yellow liquid |
| Color test (10APHA)                 | pass                             | Pass                             |
| Proton NMR spectrum                 | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager