

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-05-02 11:28:00

Date of Next Testing: 2026-05-01 11:28:00

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

CAS Number: 13811-71-7

Specifications & Purity: $\geq 99\%$

Lot #: D2228038

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