

## Certificate of Analysis

Date of Testing: 2023-03-22 19:08:27

Date of Next Testing: 2027-03-21 19:08:27

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

CAS Number: 13811-71-7

Specifications & Purity: 99%

Lot #: C2317442

SKU #: **D119332**

**Analysis: 203421**

Parameter	Limit Values	Result
Specific Rotation [a] <sub>20</sub> /D	-8.1--7.5 (°)	-8.10 °
Refractive index n <sub>20</sub> /D	1.446-1.448	1.45
Specific gravity	1.206-1.21	1.21
Purity(GC)	99-100 (%)	99.21 %
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