

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-08-29 11:45:55
 Date of Next Testing: 2026-08-28 11:45:55
 Product Name: (1R,2R,3S,5R)-(-)-2,3-Pinenediol
 CAS Number: 22422-34-0
 Specifications & Purity: ≥98%(GC)
 Lot #: H2224039
 SKU #: R160959
 Version: 1
 Analysis #: 102769
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.47900 %
Melting point	54-58 (°C)	56.57000 °C
Specific Rotation [α] _{20/D} (c=6.5 in Toluene)	-11- -5 (°)	-8.49800 °
Appearance(R160959)	White to Almost white powder to crystal	White to Almost white powder to crystal
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager