

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-11-01 14:45:24  
 Date of Next Testing: 2027-10-31 14:45:24  
 Product Name: **(1S,2S,3R,5S)-(+)-Pinanediol**  
 CAS Number: 18680-27-8  
 Specifications & Purity:  $\geq 99\%$   
 Lot #: J2330500  
 SKU #: **S102632**  
 Version: **0**  
 Analysis #: **163403**  
 Storage Temperature: Store at 2-8°C

| Parameter                                                     | Limit Values                      | Result                            |
|---------------------------------------------------------------|-----------------------------------|-----------------------------------|
| Melting point                                                 | 52-60 (°C)                        | 58.83000 °C                       |
| Specific Rotation $[\alpha]_{20/D}(c=6.5 \text{ in Toluene})$ | 7-10 (°)                          | 8.70100 °                         |
| Purity(GC)                                                    | 99-100 (%)                        | 99.29200 %                        |
| Enantiometric Excess                                          | 98.5-100 (%)                      | 99.50000 %                        |
| Appearance (S102632)                                          | white to beige powder or crystals | white to beige powder or crystals |
| Infrared spectrum                                             | Conforms to Structure             | Conforms to Structure             |
| Proton NMR spectrum                                           | Conforms to Structure             | Conforms to Structure             |



John Su  
QA & QC Manager