

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-03-14 16:11:48  
 Date of Next Testing: 2024-03-13 16:11:48  
 Product Name: (-)-Dimethyl D-tartrate  
 CAS Number: 13171-64-7  
 Specifications & Purity: ≥98%(GC)  
 Lot #: B2222460  
 SKU #: D138152  
 Version: 0  
 Analysis #: 049519  
 Storage Temperature: Room temperature, Argon charged

| Parameter                                                       | Limit Values                         | Result                               |
|-----------------------------------------------------------------|--------------------------------------|--------------------------------------|
| Purity(GC)                                                      | 98-100 (%)                           | 98.22000 %                           |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in H <sub>2</sub> O) | -22--20 (°)                          | -20.99100 °                          |
| Melting point                                                   | 48-56 (°C)                           | 50.24000 °C                          |
| Appearance (D138152)                                            | White Powder, Crystals and/or Chunks | White Powder, Crystals and/or Chunks |
| Infrared spectrum                                               | Conforms to Structure                | Conforms to Structure                |



John Su  
QA & QC Manager