

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-09 15:27:59  
 Date of Next Testing: 2026-08-08 15:27:59  
 Product Name: **Calcium  $\alpha$ -D-heptagluconate hydrate**  
 CAS Number: 17140-60-2  
 Specifications & Purity:  $\geq 98\%$   
 Lot #: H2307680  
 SKU #: **C352040**  
 Version: **2**  
 Analysis #: **243590**  
 Storage Temperature: Store at 2-8°C

| Parameter                                                   | Limit Values                       | Result                             |
|-------------------------------------------------------------|------------------------------------|------------------------------------|
| Purity(Complexometric titration)                            | 97.5-102.5 (%)                     | 100.60000 %                        |
| Specific rotation $[\alpha]_{20/D}(c=5\% \text{ in water})$ | 1.8-2.2 (°)                        | 1.90000 °                          |
| Loss on drying                                              | 3-8 (%)                            | 6.50000 %                          |
| Appearance(C352040)                                         | White to Very faintly beige powder | White to Very faintly beige powder |
| NMR Spectrum 1H                                             | Conforms to Structure              | Conforms to Structure              |



John Su  
QA & QC Manager