

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-10-14 18:11:50  
 Date of Next Testing: 2027-10-14 18:11:50  
 Product Name: **Cefsulodin Sodium Salt Hydrate**  
 CAS Number: 52152-93-9  
 Specifications & Purity:  $\geq 95\%$ (HPLC)  
 Lot #: J2510036  
 SKU #: **C136645**  
 Version: **0**  
 Analysis #: **591420**  
 Storage Temperature: Store at -20°C, Argon charged

| Parameter                                                                                        | Limit Values                     | Result                           |
|--------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|
| Purity(HPLC)                                                                                     | 95-100 (%)                       | 97.57600 %                       |
| Water by Karl Fischer                                                                            | 0-10 (%)                         | 6.41 %                           |
| Carbon by Elemental Analysis(anhydrous)                                                          | 44.7-48.1 (%)                    | 44.90 %                          |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})(\text{calcd. on anh. substance})$ | 16.5-20 (°)                      | 16.53 °                          |
| Nitrogen by Elemental Analysis (anhydrous)                                                       | 9.1-10.6 (%)                     | 9.87 %                           |
| Appearance (C136645)                                                                             | Off-White to Light Yellow Powder | Off-White to Light Yellow Powder |
| Proton NMR spectrum                                                                              | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager