

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-05-21 16:12:30  
 Date of Next Testing: 2030-05-20 16:12:30  
 Product Name: (2-Hydroxypropyl)- $\beta$ -cyclodextrin  
 CAS Number: 128446-35-5  
 Specifications & Purity:  $\geq 97\%$   
 Lot #: E2611359  
 SKU #: H108813  
 Version: 2  
 Analysis #: 698029  
 Storage Temperature: Room temperature

| Parameter                                                                           | Limit Values              | Result                    |
|-------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Purity(HPLC)                                                                        | 97-100 (%)                | 100.00000 %               |
| Water by Karl Fischer                                                               | 0-7.5 (%)                 | 3.34640 %                 |
| Molar substitution degree                                                           | 0.4-1.5                   | 0.66000                   |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})$                     | 120-135 ( $^{\circ}$ )    | 134.95000 $^{\circ}$      |
| Appearance (H108813)                                                                | White to Off-White Powder | White to Off-White Powder |
| Proton NMR spectrum                                                                 | Conforms to Structure     | Conforms to Structure     |
| Solubility in H <sub>2</sub> O , Colorless to Very Faint Yellow, Clear, 2g plus 5ml | pass                      | Pass                      |



John Su  
QA & QC Manager