

ALADDIN SCIENTIFIC CORPORATION  
14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-01-12 17:21:34  
Date of Next Testing: 2026-01-11 17:21:34  
Product Name: (2-Hydroxypropyl)- $\alpha$ -cyclodextrin  
CAS Number: 128446-33-3  
Specifications & Purity: average Mw ~1180  
Lot #: A2309747  
SKU #: H302329  
Version: 1  
Analysis #: 147308  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Specific Rotation [a] <sub>20</sub> /D(c=1 in H <sub>2</sub> O)	119.5 - 130.5 (°)	122.11100 °
Average Molecular Weight	1080-1280	1180.00000
Appearance (H302329)	White or off-white powder	White or off-white powder
Proton NMR spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager