

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-07-18 11:33:06  
Date of Next Testing: 2028-07-17 11:33:06  
Product Name: **(2-Hydroxypropyl)- $\beta$ -cyclodextrin**  
CAS Number: 128446-35-5  
Specifications & Purity: 97%  
Lot #: G2408452  
SKU #: **H108813**  
Version: **0**  
Analysis #: **377889**

Parameter	Limit Values	Result
Purity(HPLC)	97-100 (%)	99.64000 %
Specific Rotation [a] <sub>D</sub> 20/D(c=1 in H <sub>2</sub> O)	120-135 (°)	133.57°
Water by Karl Fischer	0-7.5 (%)	3.29 %
beta-cyclodextrin (dry basis)	0-2 (%)	1.00 %
NMR (degree of substitution)	2-6	2.66
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