

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing:	2022-09-26 18:43:42
Date of Next Testing:	2026-09-25 18:43:42
Product Name:	(2-Hydroxypropyl)-β-cyclodextrin
CAS Number:	128446-35-5
Specifications & Purity:	$\geq 97\%$
Lot #:	I2222847
SKU #	H108813
Version	2
Analysis #:	099881
Storage Temperature:	Room temperature

Parameter	Limit Values	Result
Specific Rotation [a] _D 20 (c=1 in H ₂ O)	120-135 (°)	131.99500 °
Water by Karl Fischer	0-7.5 (%)	6.77340 %
beta-cyclodextrin (dry basis)	0-2 (%)	1.30000 %
NMR (degree of substitution)	2-6	4.50000
Purity(HPLC)	97-100 (%)	99.52600 %
Appearance (H108813)	White to Off-White Powder	White to Off-White Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O , Colorless to Very Faint Yellow, Clear, 2g plus 5ml	pass	Pass



John Su
QA & QC Manager