

## Certificate of Analysis

Date of Testing: 2022-09-06 12:51:05  
Date of Next Testing: 2026-09-05 12:51:05  
Product Name:  **$\alpha$ -Cyclodextrin**  
CAS Number: 10016-20-3  
Specifications & Purity:  $\geq 98.0\%$ (HPLC)  
Lot #: I2202458  
SKU # **C106777**  
Analysis: **118334**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.60900 %
Ignition Residue (as sulfate)	0-0.05 (%)	0.04 %
Water by Karl Fischer	0-14.5 (%)	8.03 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})(\text{calcd. on anh. substance})$	146-153 ( $^{\circ}$ )	146.36 $^{\circ}$
Appearance (C106777)	white powder	White powder
Solubility, Colorless Clear , 1 mg/ml, H <sub>2</sub> O	pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager