

## Certificate of Analysis

Date of Testing: 2023-04-25 16:49:20  
Date of Next Testing: 2027-04-24 16:49:20  
Product Name: **α-Cyclodextrin**  
CAS Number: 10016-20-3  
Specifications & Purity: ≥98.0%(HPLC)  
Lot #: D2321766  
SKU #: **C106777**  
Analysis: **159791**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.41900 %
Ignition Residue (as sulfate)	0-0.05 (%)	0.03 %
Water by Karl Fischer	0-14.5 (%)	5.29 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})(\text{calcd. on anh. substance})$	146-153 (°)	146.43 °
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