

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-06-27 09:58:49
 Date of Next Testing: 2026-06-26 09:58:49
 Product Name: **3A-Amino-3A-deoxy-(2AS,3AS)- α -cyclodextrin Hydrate**
 CAS Number: 121916-94-7
 Specifications & Purity: $\geq 90\%$ (HPLC)
 Lot #: F2221137
 SKU #: **A151545**
 Version: **1**
 Analysis #: **094360**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Water by Karl Fischer	0-15 (%)	10.70000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})(\text{calcd. on anh. substance})$	127-138 ($^{\circ}$)	134.00000 $^{\circ}$
Purity(HPLC)	90-100	93.30000
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance(A151545)	White to Almost white powder to crystal	White to Almost white powder to crystal



John Su
QA & QC Manager