

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-06-14 13:19:08
 Date of Next Testing: 2026-06-13 13:19:08
 Product Name: **Cinchonine monohydrochloride hydrate**
 CAS Number: 5949-11-1
 Specifications & Purity: $\geq 80\%$
 Lot #: F2210625
 SKU #: **C100937**
 Version: **0**
 Analysis #: **099302**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(Nonaqueous Titration)(calcd.onanh.substance)	98-100 (%)	99.20000 %
Loss on drying	0-12 (%)	0.00000 %
Purity(HPLC)	80-100 (%)	85.29000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in EtOH})$	177-187 ($^{\circ}$)	177.42300 $^{\circ}$
Appearance (C100937)	white powder	White powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager