

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-03-06 16:36:11

Date of Next Testing: 2027-03-05 16:36:11

Product Name: **Cinchonine monohydrochloride hydrate**

CAS Number: 5949-11-1

Specifications & Purity: $\geq 80\%$

Lot #: B2328532

SKU #: **C100937**

Version: **0**

Analysis #: **194811**

Storage Temperature: Room temperature

Parameter	Limit Values	Result
Purity(Nonaqueous Titration)(calcd.onanh.substance)	98-100 (%)	99.38000 %
Loss on drying	0-12 (%)	0.03160 %
Purity(HPLC)	80-100 (%)	83.96000 %
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in EtOH})$	177-187 ($^{\circ}$)	179.77000 $^{\circ}$
Appearance (C100937)	white powder	White powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager