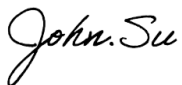


ALADDIN SCIENTIFIC CORPORATION
 14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-06-02 15:55:23
 Date of Next Testing: 2029-06-01 15:55:23
 Product Name: **(+)-Cinchonine**
 CAS Number: 118-10-5
 Specifications & Purity: Moligand™, ≥98%
 Lot #: E2523160
 SKU #: **C106926**
 Version: **0**
 Analysis #: **510087**
 Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Loss on drying	0-1 (%)	0.50000 %
Purity(HPLC) (~85% Cinchonine + ~15% dihydrocinchonine)	98-100 (%)	99.40000 %
Quinidine	0-3 (%)	0.90000 %
Specific Rotation $[\alpha]_{20/D}(c=0.5 \text{ in EtOH})$	218-228 (°)	225.62100 °
Sulfate Ash	0-0.1 (%)	0.00900 %
Quinine	0-3 (%)	1.10000 %
Purity(Nonaqueous Titration)	98-100 (%)	99.24000 %
Appearance (C106926)	white to grey powder or crystals	white to grey powder or crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
 QA & QC Manager