

Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2025-06-02 15:59:19  
Date of Next Testing: 2029-06-01 15:59:19  
Product Name: **(+)-Cinchonine**  
CAS Number: 118-10-5  
Specifications & Purity:  $\geq 98\%$   
Lot #: E2523202  
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 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            |

