

## Certificate of Analysis

Date of Testing: 2024-05-13 16:06:00  
Date of Next Testing: 2027-05-13 16:06:00  
Product Name: **Quinine**  
CAS Number: 130-95-0  
Specifications & Purity: for fluorescence,  $\geq 98.0\%$   
Lot #: H2103380  
SKU #: **Q105030**  
**Analysis:** **357306**  
Storage Temperature: Protected from light, Argon charged

Parameter	Limit Values	Result
Purity(dried material, NT)	97.5-102.5 (%)	101.10 %
Specific Rotation $[\alpha]_{20}^D(c=1 \text{ in CHCL}_3)$	-131--121 (°)	-121.01 °
Melting point	173-175 (°C)	174.97000 °C
loss on drying, 110 °C	0-1 (%)	0.01 %
dihydroquinine(NMR)	0-5 (%)	4.13000 %
Appearance (Q105030)	white to light grey powder	white to light grey powder
Fluorescence, $\lambda_{ex}$ 347 nm; $\lambda_{em}$ 448 nm in 0.5 M sulfuric acid	Conforms	Conforms
Infrared spectrum	Conforms to Structure	Conforms to Structure
suitability for fluorescence	pass	Pass



John Su  
QA & QC Manager