

## Certificate of Analysis

Date of Testing: 2023-01-11 15:38:13  
Date of Next Testing: 2027-01-10 15:38:13  
Product Name: **Quinine sulfate dihydrate**  
CAS Number: 6119-70-6  
Specifications & Purity: 98%  
Lot #: A2305604  
SKU #: **Q110175**  
**Analysis:** **177859**  
Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Loss on drying	3-5 (%)	4.32 %
Sulfate Ash	0-0.1 (%)	0.00 %
Purity (Titration by NaOH)(anhydrous)	97.5-102.5 (%)	100.63 %
Specific Rotation $[\alpha]_{20/D}(c=2 \text{ in } 0.1 \text{ M HCl})$	-245--234 (°)	-234.10 °
Appearance (Q110175)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager