

## Certificate of Analysis

Date of Testing: 2023-03-30 20:25:20

Date of Next Testing: 2027-03-29 20:25:20

Product Name: **Quinine hydrochloride dihydrate**

CAS Number: 6119-47-7

Specifications & Purity:  $\geq 99\%$

Lot #: C23241468

SKU #: **Q107527**

Version: **0**

Analysis #: **182289**

| Parameter                                                                                                               | Limit Values                                    | Result                                          |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Loss on drying(105 °C, 60 Minutes)                                                                                      | 0-10 (%)                                        | 6.52 %                                          |
| Specific Rotation $[\alpha]_{20/D}(c=2 \text{ in } 0.1 \text{ M HCl in } -255--245 \text{ } ^\circ)$<br>calcd.on dried) |                                                 | -249.99 °                                       |
| Purity(Nonaqueous Titration)(calcd.on dried substance)                                                                  | 99-101 (%)                                      | 99.09 %                                         |
| Appearance (Q107527)                                                                                                    | White to Off-White Powder, Crystals or Granules | White to Off-White Powder, Crystals or Granules |
| Proton NMR spectrum                                                                                                     | Conforms to Structure                           | Conforms to Structure                           |
| Solubility in hot H <sub>2</sub> O                                                                                      | almost transparency                             | almost transparency                             |



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