



CERTIFICATE OF ANALYSIS

Product	Quinine hemisulfate salt monohydrate
Grade	Reagent
Product Code	QB0802
Formula	$C_{20}H_{24}N_2O_2 \cdot 0.5H_2O_4S \cdot H_2O$
MW	391.47
CAS#	6119-70-6
Lot No	

Test Items	Specifications	Results
Appearance	White, fine, needle-like crystals and/or fine powder. Odorless, has a persistent, very bitter taste. It darkens on exposure to light.	
Identification A,B,C	To pass test	
Specific Rotation	-235° - -245°	
Water	4.0%-5.5%	
Residue on Ignition	≤0.1%	
Heavy Metals	≤0.001%	
Assay (anhydrous basis)	99.0-101.0%	
Chloroform-Alcohol insoluble substances	≤0.1%	
Chromatographic Purity	To pass test	
Limit of Dihydroquinine Sulfate	≤10.0%	
Residue Solvents (Toluene)	≤890 ppm	
Solubility (5% in 95% Ethanol)	Clear, colorless to very faint yellow solution	

Storage: R.T.