

CERTIFICATE OF ANALYSIS

Product Name	Berberine hydrochloride		
Botanical Name	<i>Phellodendron chinense</i> Schneid		
Used part	Root		
Sterilization Method	High temperature sterilization		
Batch Number	20220725	Manufacture Date	20220725
Report Date	20220726	Expiry Date	20240724

Item of Analysis	Specification	Results	Test Methods
Assy	98%	98.2%	HPLC
Organoleptic			
Appearance	Powder	Conforms	Organoleptic
Color	Light Yellow Powder	Conforms	Organoleptic
Odor	Characteristic	Conforms	CP2010
Taste	Characteristic	Conforms	CP2010
Physical Characteristics			
Particle Size	100% pass 80 mesh	80MESH	CP2010
Loss on drying	12%NMT (%)	9.83%	USP<731>
Total ash	5%NMT (%)	3.05%	USP<561>
Bulk Density	45-60g/100mL	48g/100mL	CP2010IA
Residue of Solvents	None	Conform	NLS-QCS-1007
Pesticide Residues	1ppm NMT	0.10 ppm	Gas Chromatography
Heavy metals			
Total Heavy Metals	10ppm Max	Conform	USP<231>method II
Lead (Pb)	2ppm NMT	Conform	ICP-MS
Arsenic (As)	2ppm NMT	Conform	ICP-MS
Cadmium (Cd)	2ppm NMT	Conform	ICP-MS
Mercury (Hg)	0.5ppm NMT	Conform	ICP-MS
Microbiological Tests			
Total Plate Count	1000cfu/g Max	Conform	USP<61>
Yeast & Mold	100cfu/g Max	Conform	USP<61>
E. Coli.	Negative	Conform	USP<61>
Salmonella	Negative	Conform	USP<61>
Staphylococcus	Negative	Conform	USP<61>

Storage: Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Shelf Life: 24 months if store under the conditions above and stay in original packaging.

