



Xi'an Green Spring Technology Co.,Ltd

Certificate of Analysis

General Information

Product Name:	<i>Pyrroloquinoline Quinone Disodium</i>	CAS. No.:	122628-50-6
Batch #	PQ2023120711	Representative QTY	48.3 kg
Produce Date	2023-12-5	Analysis Date	2023-12-7

Analysis item	Specification	Result	Method
A.IR B.HPLC	IR spectrum is concordant with spectrum of PQQ RS. Retention time of the sample matches with the standard in HPLC purity test.		

Physical Tests

Appearance	Henna fine powder	Complies	Visual
Smell & taste	Salty	Complies	Organoleptic
Particle size	99% pass 20mesh	Complies	USP43<786>
Water content	≤13.00%	6.22%	USP43<921>
Residue on Ignition	≤1.00%	0.17%	USP43<281>
PQQ.Na2 (Anhydrous basis)	98.00%-102.00%	99.72%	USP43<621>
Sodium (Anhydrous basis)	10.50%-13.00%	11.10%	USP43<621>
PQQ (Anhydrous basis)	≥85.00%	88.61%	USP43<621>
Total impurities	≤1.00%	0.39%	USP43<621>

Chemical Tests

Heavy Metals	≤10.00ppm	Complies	USP43<231>
Pb<Lead>	≤0.50ppm	Not detected	USP43<211>
As< Inorganic Arsenic	≤1.00ppm	Not detected	USP43<251>
Cd<Cadmium>	≤0.10ppm	0.02ppm	USP43<232>
Hg<Total Mercury>	≤0.10ppm	Not detected	USP43<261>
Residue of Ethanol	≤5,000ppm	900ppm	USP43<467>

Microbiological Tests

Total Bacterial Counts	≤1,000cfu/g	<10cfu/g	USP43<2021>
Yeasts and Molds	≤100cfu/g	<10cfu/g	USP43<2021>
Coliforms	≤0.30MPN/g	Complies	USP43<2022>
E. Coli	Negative in 1g	Complies	USP43<2022>
Salmonella	Negative in 10g	Complies	USP43<2022>

* Conclusion: Conform to above specifications.

* Statements: Irradiated free, GMO free, Additives free,WADA Free, BSE/TSE Free.

* Packaging: 1/5kg per tin or 25kg per fiber drum.

* Storage Condition: Preserve in well-closed, tight containers with temperature below 25°C.

* Shelf Life: 3 years when properly stored.

Quality Assurance: Liang Yan

