CERTIFICATE OF ANALYSIS

1. GENERAL PRODUCT & BATCH INFORMATION

Product Name	Blue Lotus Whole Flowers (Dried)
Botanical Name	*Nymphaea caerulea*
Plant Part Used	100% Whole Flower
Batch / Lot Number	BLUE-6391
Harvest Date	06 / 01 / 2026
Manufacture / Packing Date	06 / 05 / 2026
Expiry / Best Before Date	06 / 05 / 2029
Report / Issue Date	06 / 12 / 2026

2. PHYSICAL & ORGANOLEPTIC ANALYSIS

Test Item	Specification Requirement	Actual Test Result	Test Method
Appearance	Dried, whole intact flowers	**Conforms**	Visual
Color	Deep blue-purple petals with yellow stamens	**Conforms**	Visual
Odor	Strongly floral, sweet, characteristic	**Conforms**	Organoleptic
Foreign Matter	≤ 2.0%	**0.25%**	USP <561>
Stem / Petiole Content	≤ 5.0%	**1.10%**	Visual / Manual
Loss on Drying (Moisture)	≤ 12.0%	**8.20%**	105°C / 2 hours
Total Ash	≤ 10.0%	**5.45%**	550°C
Acid-Insoluble Ash	≤ 2.0%	**0.21%**	USP <561>

3. IDENTIFICATION & CHEMICAL PROFILE

Test Item	Specification Requirement	Actual Test Result	Test Method
Species Identification	Positive for *Nymphaea caerulea*	**Positive**	TLC / HPTLC
Nuciferine Content	Report % (Alkaloid verification)	**0.38%**	HPLC
Apomorphine	Qualitative: Must be present	**Present**	HPLC / TLC

4. CONTAMINANTS & PURITY CONTROL

Heavy Metals

Test Item	Specification Requirement	Actual Test Result	Test Method
Lead (Pb)	≤ 5.0 ppm	**0.18 ppm**	ICP-MS
Arsenic (As)	≤ 2.0 ppm	**0.06 ppm**	ICP-MS
Cadmium (Cd)	≤ 1.0 ppm	**0.02 ppm**	ICP-MS
Mercury (Hg)	≤ 0.2 ppm	**Not Detected (<0.01 ppm)**	ICP-MS

Microbiological Analysis

Test Item	Specification Requirement	Actual Test Result	Test Method
Total Aerobic Plate Count	≤ 100,000 cfu/g	**1,200 cfu/g**	USP <2021> / AOAC
Total Yeast & Mold Count	≤ 10,000 cfu/g	**180 cfu/g**	USP <2021> / AOAC
E. coli	Negative in 10g	**Negative**	USP <2022>
Salmonella spp.	Negative in 25g	**Negative**	USP <2022>

Pesticides & Mycotoxins

Test Item	Specification Requirement	Actual Test Result	Test Method
Pesticide Residues	Must comply with USP <561> / FDA limits	**Complies (ND)**	GC-MS / LC-MS
Aflatoxins (B1, B2, G1, G2)	≤ 20 ppb (Total)	**Not Detected (<2 ppb)**	HPLC / ELISA

5. PACKAGING & STORAGE STATEMENT

Packaging Type Used: Moisture-proof, light-blocking vacuum sealed bags in corrugated master cartons.
Storage Conditions: Store in a cool, dry place away from direct sunlight, moisture, and strong odors.

6. LABORATORY OUTCOME

Final Batch Disposition: [X] PASSED / [ ] FAILED