



Hongda
Phytochemistry

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Headquarter: 1932 S Lynx Place, Ontario, CA 91761,US

Factory: No.2, Hongda Industrial District, Dacheng, Sanyuan, Xianyang, Shaanxi,China.

USA Warehouse: 1932 S. Lynx PL, Ontario, CA 91761,US

NJ Warehouse: 52 Butler Street, Unit A Elizabeth, NJ 07206

Certificate of Analysis

Marigold Extract Lutein Beadlets 5% HPLC

Batch No.	YHS-210612	Manufacturing Date	6/12/2021
Batch Quantity	1000KG	Expiration Date	6/11/2024
Botanical Source	<i>Tagetes erecta L.</i>	Country of Origin	China
Appearance	Free-flowing Orange Yellow Beadlets	Part Used	Flower (100% Natural)
Solvents Used	Water&Ethanol	Carrier Used	Maltodextrin & Microcrystalline Cellulose
Sterilization Method	Heat NON-IRR	Kosher Halal	Yes Yes

ITEMS	SPECIFICATION	RESULT	METHOD
Content	Lutein≥5%	5.83%	HPLC USP <621>
Content	Zeaxanthin---	0.44%	HPLC USP <621>
Identification	Correspond to standard	Conform	TLC USP <201>

PHYSICAL CHARACTERISTICS

Particle Size	NLT 95% Through 20 mesh	Conform	Analytical sieving USP <786>
Loss on Drying	NMT 8.00%	5.22%	USP <731>
Residue on Ignition	NMT 2.00%	0.33%	USP <561>
Bulk Density	0.55 – 0.85 g/mL	0.77g/mL	USP <616> Method I
Tapped Density	0.65 – 0.95 g/mL	0.86g/mL	USP <616> Method I

CHEMICAL CHARACTERISTICS

Residual Solvent	NMT 5000ppm	Conform	GC USP <467>
Pesticide Residue	Meet the requirements	Conform	GC USP <561>
Heavy Metals(as Pb)	NMT 10ppm	Conform	USP <231> Method II
Arsenic (As)	NMT 0.5ppm	0.100ppm	ICP-MS
Lead (Pb)	NMT 0.5ppm	0.100ppm	ICP-MS
Cadmium(Cd)	NMT 0.5ppm	0.010ppm	ICP-MS
Mercury(Hg)	NMT 0.5ppm	0.010ppm	ICP-MS

MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT 1000cfu/g	<10cfu/g	USP<61>
Total Yeast & Mold	NMT 100cfu/g	<10cfu/g	USP<61>
E.Coli	Not Detected in(g) 10	Not Detected	USP<61>
Salmonella	Not Detected in(g) 25	Not Detected	USP<61>
Staphylococcus	Not Detected in(g) 10	Not Detected	USP<61>

Packing and Storage Polyethylene bag with cardboard drum. 25kg net.
Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Tested by: *Tracy Cui* Date: 06/22/2021

Approved by: *Jack Jia* Date: 06/22/2021