



**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

### Huperzia Extract Huperzine-A 1% HPLC

<b>Batch No.</b>	SH-201228	<b>Manufacturing Date</b>	12/28/2020
<b>Batch Quantity</b>	150KG	<b>Expiration Date</b>	12/27/2023
<b>Botanical Source</b>	<i>Huperzia serrata (Thunb) Trev</i>	<b>Country of Origin</b>	China
<b>Appearance</b>	Brown Powder	<b>Part Used</b>	Aerial part (100% Natural)
<b>Solvents Used</b>	Water&Ethanol	<b>Carrier Used</b>	None
<b>Sterilization Method</b>	Heat    NON-IRR	<b>Kosher    Halal</b>	Yes    No

<b>ITEMS</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	<b>METHOD</b>
Assay	Huperzine-A $\geq$ 1%	1.01%	HPLC    USP<621>
Identification	Correspond to standard	Conform	TLC    USP<201>

#### PHYSICAL CHARACTERISTICS

Odor	Characteristic	Conform	Organoleptic
Taste	Characteristic	Conform	Organoleptic
Particle Size	NLT 95% Through 80 mesh	99.10%	Analytical sieving    USP <786>
Loss on Drying	NMT 5.00%	3.22%	USP <731>
Ash	NMT 5.00%	2.01%	USP <561>
Bulk Density	Between 40-60g/100ml	49.00g/100ml	USP <616> Method I

#### CHEMICAL CHARACTERISTICS

Residual Solvent	NMT 5000ppm	Conform	GC    USP <561>
Pesticide Residue	Meet the requirements	Conform	GC    USP <561>
Heavy Metals(as Pb)	NMT 10ppm	Conform	USP <231> Method II
Arsenic (As)	NMT 1ppm	0.100ppm	ICP-MS
Lead (Pb)	NMT 2ppm	0.310ppm	ICP-MS
Cadmium(Cd)	NMT 1ppm	0.040ppm	ICP-MS
Mercury(Hg)	NMT 0.1ppm	0.030ppm	ICP-MS

#### MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT 5000cfu/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: *Troy Cui*

Date: 01/07/2021

Approved by: *Jack Joa*

Date: 01/07/2021