



**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

### Turmeric Extract Tetrahydrocurcuminoids 95% HPLC

<b>Batch No.</b>	JHS-201028	<b>Manufacturing Date</b>	10/28/2020
<b>Batch Quantity</b>	1000KG	<b>Expiration Date</b>	10/27/2023
<b>Botanical Source</b>	<i>Curcuma longa L.</i>	<b>Country of Origin</b>	China
<b>Appearance</b>	Off-white to Creamish Fine Powder	<b>Part Used</b>	Rhizome (100% Natural)
<b>Solvents Used</b>	Ethanol & Acetone	<b>Carrier Used</b>	None
<b>Sterilization Method</b>	Heat    NON-IRR	<b>Kosher    Halal</b>	Yes    Yes

ITEMS	SPECIFICATION	RESULT	METHOD
Content	Tetrahydrocurcuminoids≥95%	95.10%	HPLC    USP<621>
Identification	Correspond to standard	Conform	TLC    USP<201>

#### PHYSICAL CHARACTERISTICS

Odor	Typical	Typical	Organoleptic
Taste	Typical	Typical	Olfactory
Particle Size	NLT 95% Through 80 mesh	99.00%	Analytical sieving    USP <786>
Loss on Drying	NMT 5.00%	0.79%	USP <731>
Residue on Ignition	NMT 2.00%	0.03%	USP <561>
Bulk Density	Between 40-60g/100ml	46.00g/100ml	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 2ppm	<0.01ppm	ICP-MS
Lead (Pb)	NMT 2ppm	0.190ppm	ICP-MS
Cadmium(Cd)	NMT 1ppm	<0.01ppm	ICP-MS
Mercury(Hg)	NMT 0.5ppm	<0.01ppm	ICP-MS

#### MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT3000cfu/g	Conform	USP<61>
Total Yeast & Mold	NMT300cfu/g	Conform	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: 11/05/2020

Approved by: *Jack Jia* Date: 11/05/2020