



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

Licorice Root Extract Glycyrrhizin Acid 7% HPLC

Batch No.	GC210107	Manufacturing Date	01/07/2021
Batch Quantity	3000KG	Expiration Date	01/06/2024
Botanical Source	<i>Glycyrrhiza glabra L</i>	Country of Origin	China
Appearance	Brown Yellow Fine Powder	Part Used	Root (100% Natural)
Solvents Used	Hot Water	Extract Ratio	20:1
Sterilization Method	Heat NON-IRR	Kosher Halal	Yes Yes

ITEMS	SPECIFICATION	RESULT	METHOD
Content	Glycyrrhizin Acid $\geq 7\%$	7.20%	HPLC
Content	Glycyrrhizin Acid $\geq 26\%$	27.20%	Gravimeter
Identification	Correspond to standard	Conform	TLC
Identification	An orange-red precipitate should be produced	Conform	In house

PHYSICAL CHARACTERISTICS

Particle Size	NLT 95% Through 80 mesh	99.10%	Analytical sieving USP <786>
Loss on Drying	NMT 10.00%	4.80%	USP <731>
Total Ash	NMT 12.00%	7.80%	USP <561>
Water insoluble	NMT 5.00%	1.40%	USP <561>
PH	4.5-6.0	5.90	USP <561>

CHEMICAL CHARACTERISTICS

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

MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT10000cfu/g	500cfu/g	USP<61>
Total Yeast & Mold	NMT1000cfu/g	20cfu/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: 01/16/2021

Approved by: *Jack Jia* Date: 01/16/2021