



Hongda
Phytochemistry

Tel: +86(029)87801888, 87802888

Web: www.hongdaherb.com

Headquarter: 1206, Fucheng Bld., No. 91, N. Chang'an Rd., Xian, Shaanxi, China.

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

USA Warehouse: 1901 S. Lynx Place, Ontario, CA, USA 91761

Fax: +86(029)87806888

E-mail: hongda@hongdaherb.com

Rev 3

Certificate of Analysis

Goldenseal Root Extract Berberine 5% HPLC

Batch No.	BMG-200716	Manufacturing Date	7/16/2020
Batch Quantity	1000KG	Expiration Date	7/15/2023
Botanical Source	<i>Hydrastis canadensis</i>	Country of Origin	China
Appearance	Yellow Fine Powder	Part Used	Root (100% Natural)
Solvents Used	Water&Ethanol	Carrier Used	Dextrin
Sterilization Method	Heat NON-IRR	Kosher Halal	Yes No

ITEMS	SPECIFICATION	RESULT	METHOD
Content	Berberine \geq 5%	5.12%	HPLC USP<621>
Identification	Correspond to standard	Conform	TLC USP<201>

PHYSICAL CHARACTERISTICS

Particle Size	NLT 95% Through 80 mesh	99.10%	Analytical sieving USP <786>
Loss on Drying	NMT 5.00%	3.40%	USP <731>
Total Ash	NMT 5.00%	3.61%	USP <561>
Bulk Density	Between 40-60g/100ml	48.00g/100ml	USP <616> Method I

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	<2ppm	ICP-MS
Lead (Pb)	NMT 2ppm	<2ppm	ICP-MS
Cadmium(Cd)	NMT 1ppm	<1ppm	ICP-MS
Mercury(Hg)	NMT 1ppm	<1ppm	ICP-MS

MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT10000cfu/g	1200cfu/g	USP<61>
Total Yeast & Mold	NMT1000cfu/g	70cfu/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: 07/24/2020

Approved by: *Jack Joa*

Date: 07/24/2020