



## Certificate of Analysis

### Ginkgo Biloba Extract 24% Flavone Glycosides & 6% Terpene Lactones HPLC

<b>Batch No.</b>	YXY-200221	<b>Manufacturing Date</b>	2/21/2020
<b>Batch Quantity</b>	1000KG	<b>Expiration Date</b>	2/20/2023
<b>Botanical Source</b>	<i>Ginkgo Leaf</i>	<b>Country of Origin</b>	China
<b>Appearance</b>	Light Brown Fine Powder	<b>Part Used</b>	Leaf (100% Natural)
<b>Solvents Used</b>	Water&Ethanol	<b>Extract Ratio</b>	50:1
<b>Sterilization Method</b>	Heat    NON-IRR	<b>Kosher    Halal</b>	Yes    Yes

ITEMS	SPECIFICATION (USP Grade)	RESULT	METHOD
<b>Total Flavone Glycosides</b>	<b>≥24.00%</b>	<b>25.88%</b>	<b>HPLC</b>
Quercetin	Report	12.55%	HPLC
Kaempferol	Report	10.74%	HPLC
Isorhamnetin	Report	2.59%	HPLC
<b>Total Terpene Lactones</b>	<b>≥6.00%</b>	<b>6.90%</b>	<b>HPLC</b>
Ginkgolides (A)	Report	3.12%	HPLC
Ginkgolides (B)	Report	1.33%	HPLC
Ginkgolides (C)	Report	0.48%	HPLC
Ginkgolides (J)	Report	0.11%	HPLC
Bilobalides	Report	1.86%	HPLC
Rutin	≤3.5%	2.09%	HPLC
Total Ginkgolic Acid	≤5.00ppm	0.90ppm	HPLC
Genistein	≤0.1%	0.03%	HPLC
Identification	Correspond to standard	Conform	TLC    USP<201>

#### PHYSICAL CHARACTERISTICS

Oder	Characteristic	Conform	Organoleptic
Taste	Bitter sweet and astringent taste	Conform	Organoleptic
Particle Size	NLT 95% Through 80 mesh	98.95%	Analytical sieving    USP <786>
Loss on Drying	NMT 5.00%	2.16%	USP <731>
Total Ash	NMT 5.00%	3.15%	USP <561>
Bulk Density	Between 40-60g/100ml	52.00g/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 0.5ppm	<0.5ppm	ICP-MS
Lead (Pb)	NMT 0.5ppm	<0.5ppm	ICP-MS
Cadmium(Cd)	NMT 0.1ppm	<0.1ppm	ICP-MS
Mercury(Hg)	NMT 0.1ppm	<0.1ppm	ICP-MS

#### MICROBIOLOGICAL CHARACTERISTICS

Total Plate Count	NMT10000cfu/g	200cfu/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: 02/27/2020

Approved by: *Jack Jia*

Date: 02/27/2020