



# Thera-Plantes

Solutions d'approvisionnement d'ingrédients naturels  
Natural ingredient supply and sourcing solutions



## CERTIFICATE OF ANALYSIS

Produce Name: Ginkgo Biloba Extract  
Botanical Name: Ginkgo Biloba L.  
Batch Number: 170304H

Part Used: Leaves  
Solvent Used: Ethanol

Manufacture Date: Mar 10, 2019  
Expiry Date: Mar 9, 2019  
Extract ratio: 50:1

Items	Standards	Results
<b>Physical and Chemical Analysis</b>		
Description	Yellow-Brown fine Powder	Conforms
Identification (TLC)	Positive	Positive
Particle Size	100% through 80 mesh	Conforms
Loss on Drying	≤5.0%	3.12%
Bulk Density	0.45-0.65 g/ml	Conforms
Ash Content	<0.8%	0.40%
<b>Assay</b>		
Ginkgo Flavone glycosides	≥24% HPLC	25.2% (Dried basis) Quercetin: 10.86%; Kaempferol: 11.45%; Isorhamnetin: 2.89%
Free Quercetin	≤10mg/g	1.2mg/g
Free Kaempferol	≤10mg/g	0.8mg/g
Free Isorhamnetin	≤4mg/g	0.5mg/g
Peak ratio of Quercetin/ Kaempferol	0.8~1.2	Complies
Peak ratio of Isorhamnetin / Quercetin	> 0.15	Complies
Total Terpene Lactones	≥6% HPLC	6.65%
Bilobalide	2.6~5.8% HPLC	2.88% (Dried basis)
(as Ginkgolides A+ B+C)	2.8-6.2% HPLC	3.77% (Dried basis) Ginkgolide A: 1.60%; Ginkgolide B: 1.15%; Ginkgolide C: 1.02%
Ginkgolic Acid	≤5ppm	3.8ppm
<b>Microbiological Quality</b>		
Total Plate Count	≤1000cfu/g	Conforms
Total Yeast&Mold	≤100cfu/g	Conforms
E. coil	Negative	Negative
Salmonella	Negative	Negative
Staphylococcus aureus	Negative	Negative
Pseudomonas Aeruginosa	Negative	Negative
<b>Total Heavy Metal</b>		
Lead	NMT 1.0 ppm	0.08ppm
Mercury	NMT 0.1 ppm	0.01ppm
Arsenic	NMT 1.0 PPM	0.20ppm
Cadmium	NMT 1.0 ppm	0.01ppm
<b>Residual solvents-GC</b>		
Total residual solvent	≤5000ppm	Conforms

Conclusion: The analysed sample of Ginkgo Biloba PE of the batch 170315H COMPLIES with the requirements of the above mentioned analytical documentation(s).

Storage: In Tight, Light-resistant and Dry Place. Avoid Direct Sunshine. Country of Origin: China

