

**Black Galingale Extracts Specification**

Product Name : Black Galingale Extracts  
 Origin of Material : Thailand  
 Lot No. : SP6412002  
 Extract Solvent : 70% Ethyl Alcohol  
 Extract Ratio: 1:10  
 Packaging Size : 500g

Botanical Name : *Kaempferia parvifera*  
 Part Used : (Dried Rhizome)  
 MFG. : 13/12/2021  
 EXP. : 13/12/2022  
 Packaging : Aluminium Foil Zip Lock Bag



Analysis	Specification	Reference Method
<b>Physical Test</b>		
-Appearance	Black Fine Powder	Visual
-Odor & Taste	Characteristic	Organoleptic
<b>Chemical Test</b>		
-Assay (Total Phenolic Content)	≥ 8.000 (mg GAE/g)	In-house method based on Journal of Nutritional Biochemistry 2002;13:572-84
-Assay (Total Flavonoid Content)	≥2.500 (mg QE/g)	In-house method based on international journal of pharmacy and Pharmaceutical Science 2014;406-408
-Loss On Drying	≤ 2.000 %	USP 35 <791>
<b>Heavy Metals</b>		
-Arsenic (As)	≤ 1.500 ppm	In-house method based on AOAC (2019)
-Lead (Pb)	≤ 0.500 ppm	In-house method based on AOAC (2019)
-Cadmium (Cd)	≤ 0.500 ppm	In-house method based on AOAC (2019)
-Mercury (Hg)	≤ 3.000 ppm	In-house method based on AOAC (2019)
<b>Microbiological Test</b>		
Total Aerobic Microbial Count	≤ 5 x 10 <sup>4</sup> cfu/g	In-house method based on USP41/NF36 <2021>
Total Combined Yeasts And Mold Count	≤ 5 x 10 <sup>2</sup> cfu/g	In-house method based on USP41/NF36 <2021>
Escherichia coli	Negative/10g	In-house method based on USP41/NF36 <2021>
Salmonella spp.	Negative/10g	In-house method based on USP41/NF36 <2021>
Clostridium spp.	Negative/1g	In-house method TE-MI-10 based on FDA BAM Online, 2001(Chapter 16)

Conclusion : Conform with the specification.

Storage : In cool & dry place. Keep away from strong light and heat.

Shelf life : 1 years when properly stored.

( 13 / 12 / 2021 )

Quality Control

( 13 / 12 / 2021 )

Research & Development