



Shaanxi Fairir Biotech Co.,Ltd

陕西梵若生物科技有限公司

Certificate of Analysis

Product Name	Black Pepper Extract	Botanical Source -Used Part	<i>Piper nigrum</i> L.-Fruit
Specification	Piperine $\geq 95.0\%$	Country of Origin	China
Batch number	RY20250910	Extraction Solvent	Water&Ethanol
Batch Quantity	598.0 KG	Manufacture Date	September 05, 2025
Inspection Date	September 08, 2025	Expiration Date	September 04, 2027
ITEMS	SPECIFICATION	RESULT	METHOD
Content			
Identification	Correspond to Standard	Conform	TLC USP<201>
Assay (Piperine)	$\geq 95.0\%$	95.19%	HPLC
PHYSICAL CHARACTERISTICS			
Appearance	Light Yellow Powder	Conform	Visual
Odor	Characteristic	Conform	Organoleptic
Taste	Characteristic	Conform	Organoleptic
Particle Size	NLT 95% Through 80 mesh	98.8%	Analytical sieving USP <786>
Loss on Drying	NMT 5.0 %	0.20%	USP <731>
Total Ash	NMT 5.0 %	0.10%	USP <561>
CHEMICAL CHARACTERISTICS			
Heavy Metals(as Pb)	NMT 10 ppm	Conform	USP <231> Method II
Arsenic (As)	NMT 2 ppm	0.2 mg/kg	ICP-MS USP <233>
Lead (Pb)	NMT 2 ppm	0.46 mg/kg	ICP-MS USP <233>
Cadmium(Cd)	NMT 1 ppm	Conform	ICP-MS USP <233>
Mercury(Hg)	NMT 0.1 ppm	Not Detected	ICP-MS USP <233>
PAH4	NMT 50 ppb	Conform	GC-MS
Ethylene Oxide	NMT 0.1 ppm	Not Detected	GC-MS
MICROBIOLOGICAL CHARACTERISTICS			
Total Plate Count	NMT 1,000 cfu/g	Conform	USP<61>
Total Yeast & Mold	NMT 100 cfu/g	Conform	USP<61>
<i>E. Coli</i>	Not Detected in(g) 10	Not Detected	USP<62>
<i>Salmonella</i>	Not Detected in(g) 25	Not Detected	USP<62>
<i>Staphylococcus</i>	Not Detected in(g) 10	Not Detected	USP<62>
Conclusion: Conforms with specification, Non-GMO, Allergen Free, BSE/TSE Free			
Packing and Storage	Polyethylene bag with cardboard drum. 25 kg/180kg net.		
	Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.		



Detected by: Zhang Rong

Checked by: Wei Li Juan