



Certificate of Analysis

Product Name:	Black Pepper Extract	Batch Number:	Varies
Botanical Name:	<i>Piper nigrum</i>	Manufacture Date:	Varies
Used part:	Seeds	Expiry Date:	Varies

IDENTIFICATION		SPECIFICATION	RESULT
Assay		98% / $\geq 95\%$	98.2% / 95.32%
Physical	Appearance	Light yellow / Off-white powder	Complies
	Odor & Taste	Characteristic	Complies
	Particle Size	95% pass 80 mesh / 100% pass 80 mesh	Complies
	Loss on drying	$\leq 1 - 5\%$	0.13 - 0.21%
	Total ash	$\leq 1 - 5\%$	0.15 - 0.18%
	Residue of Solvents	None	Complies
Chemical	Total Heavy Metals	≤ 10 ppm	Complies
	Lead (Pb)	$\leq 1 - 2$ ppm	Complies
	Arsenic (As)	$\leq 1 - 2$ ppm	Complies
	Cadmium (Cd)	$\leq 1 - 2$ ppm	Complies
	Mercury (Hg)	$\leq 0.5 - 1$ ppm	Complies
Microbial	Total Plate Count	$\leq 1000 - 3000$ cfu/g	Complies
	Yeast & Mold	$\leq 100 - 300$ cfu/g	Complies
	E. Coli, Salmonella, Staphylococcus	Negative	Complies

Else	Storage condition	Sealed, kept in shady and dry place
	Shelf life	Two years

