



# Bulk Naturals Wholesale LLC

**bulknaturalswholesale.com**

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## PINE BARK BOTANICAL EXTRACT POWDER

### CERTIFICATE OF ANALYSIS

LOT: BN230105/BE

**Manufacture Date:** January 5, 2023

**Expiration Date:** January 4, 2026

**QA Signature:** Steven Konert

Specification	Parameter	Result	Test Method
Content	Proanthocyanidins ≥ 95 %	96.67%	UV    USP <857>
Identification	Correspond to standard	Conform	TLC    USP <201>
<b>SENSORY CHARACTERISTICS</b>			
Appearance	Dark reddish-brown free-flowing powder.	Reddish Brown	Organoleptic
Organization form	Powdery, non caking	Conform	Organoleptic
Odor and Taste	light Smell and Astringent	Conform	Organoleptic
Impurity	No foreign matter visible to normal vision	Conform	Organoleptic
<b>PHYSICAL CHARACTERISTIC</b>			
Particle Size	NLT 90% Through 80 mesh	100.00%	Analytical sieving    USP <786>
Loss on Drying	NMT 5.0%	3.96%	USP <731>
Total Ash	NMT 5.0%	2.12%	USP <561>
Bulk Density	Between 40 ~ 70g/100ml	48.63g/100ml	USP <616> Method I
Tapped Density	Between 50 ~ 90g/100ml	71.51g/100ml	USP <616> Method I
<b>CHEMICAL CHARACTERISTICS</b>			
Residual Solvent	NMT 5,000 ppm	Conform	GC    USP <467>
Pesticide Residue	Meet the requirements	Conform	GC    USP <561>
Heavy Metals (as Pb)	NMT 10 ppm	Conform	USP <231> Method II
Arsenic (As)	NMT 2 ppm	0.0040 ppm	ICP-MS    USP <233>
Lead (Pb)	NMT 2 ppm	0.3578 ppm	ICP-MS    USP <233>
Cadmium (Cd)	NMT 1 ppm	0.0940 ppm	ICP-MS    USP <233>
Mercury (Hg)	NMT 1 ppm	Not Detected	ICP-MS    USP <233>
<b>MICROBIOLOGICAL CHARACTERISTICS</b>			
Total Plate Coun	NMT 10,000 cfu/g	< 1000cfu/g	USP <61>
Total Yeast & Mold	NMT 1,000 cfu/g	< 100cfu/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>

Shelf life is guaranteed for three years from the date of production if the product is stored in the unopened original container between 15°C - 30°C, protected from light. Containers that have been opened should be tested at least yearly to ensure potency. Although Bulk Naturals Wholesale LLC believes the above information to be accurate based on the information available to Bulk Naturals, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to using to verify that the product purchased from Bulk Naturals meets their quality requirements and is appropriate for the use to which the product is to be put. The information provided above shall be considered effective only for the lot with which the information is being provided. Use and purchase of this material are subject to Bulk Naturals Wholesale LLC standard terms and conditions, which supersede any conflicting terms contained on the Buyer's purchase order or any document or instrument supplied by Buyer.