

## CERTIFICATE OF ANALYSIS

<b>Product Name</b>	Alpha Arbutin		
<b>Batch Number</b>	20221025	<b>Manufacture Date</b>	20221025
<b>Country of Origin</b>	China		
<b>Report Date</b>	20221025	<b>Expiry Date</b>	20241024

Item	Specification	Result	Method
Marker Compounds Alpha arbutin	>99.0%	99.9%	HPLC
<b>Organoleptic Data</b>			
Appearance	Powder	Conform	GJS-QCS-1008
Color	White crystalline powder	Conform	GB/T 5492-2008
Odor	Characteristic	Conform	GB/T 5492-2008
Taste	Characteristic	Conform	GB/T 5492-2008
<b>Physical Characteristics</b>			
Melting point	203~206±1°C	204-205	GB21781-2008T
Specific optical rotation	【α】 D20=+176~184°	+179.6	GB 613-88
Solubility	Soluble in ethanol, acetone,	Conform	Visual
Particle Size (80 mesh)	98.0%pass 80mesh	Conform	GB/T 5507-2008
Moisture	<0.5%	0.02%	GB/T 14769-1993
Ash Content	<0.5%	0.1%	AOAC 942.05, 18th
Solvent Residue	None	Conform	GJS-QCS-1007
<b>Heavy Metals</b>			
Total Heavy Metals	<10 ppm	Conform	USP <231>, method II
Arsenic	<1.0 ppm	Conform	AOAC 986.15, 18th
Lead	<1.0 ppm	Conform	AOAC 986.15, 18th
Mercury	<0.5 ppm	Conform	AOAC 971.21, 18th
<b>Microbiology</b>			
Total Plate Count	<1,000cfu/g	72cfu/g	AOAC 990.12, 18th
Total Yeast & Mold	<100cfu/g	10cfu/g	FDA (BAM) Chapter 18,
E. Coli	Negative	Negative	AOAC 997.11, 18th
Salmonella	Negative	Negative	FDA (BAM) Chapter 5, 8th

**Storage:** Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

**Shelf Life:** 24 months if store under the conditions above and stay in original packaging.

