

CERTIFICATE OF ANALYSIS

Product Name	L-Alanine		
Batch Number	20221025	Manufacture Date	20221025
Report Date	20221025	Expiry Date	20241024

Item of Analysis	Specification	Results	Test Methods
Basic Product Information			
Country of Origin	China	Conform	
Marker Compounds			
Assay	>98.5%	99.2%	HPLC
Organoleptic Data			
Appearance	Powder	Conform	HE-QCS-1008
Color	White	Conform	GB/T 5492-2008
Odor	Characteristic	Conform	GB/T 5492-2008
Taste	Characteristic	Conform	GB/T 5492-2008
Process Data			
Drying Method	Vacuum drying	Conform	
Physical Characteristics			
Specific Rotation[α] _{D25}	+13.7°~+15.1°	+14.5°	
PH	5.5~7.0	6.1	
Particle Size (80 mesh)	98.0%pass 60mesh	Conform	GB/T 5507-2008
Moisture	<0.5%	0.08%	GB/T 14769-1993
Ash Content	<0.1%	0.06%	AOAC 942.05, 18th
Chloride	<0.05%	Conform	
Sulfate	<0.03%	Conform	
Organic Impurities	No more than 0.5% of any individual impurity is found; No more than 2.0% of total impurities is found	Conform	
Heavy Metals			
Total Heavy Metals	<15ppm	Conform	USP <231>, method II
Microbiology			
Total Plate Count	<1,000cfu/g	Conform	AOAC 990.12, 18th
Total Yeast & Mold	<100cfu/g	Conform	FDA (BAM) Chapter 18, 8th
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.

