

## CERTIFICATE OF ANALYSIS

Product Name: L-Citrulline Malate 1 : 1	Quantity: 150kg	Batch No.: IBBF191126
Production date: 2019.11.26	Sampling date: 2019.11.27	Expiration Date: 2021.11.25
Reference standard: Enterprise standard		
Item	Specifications	Results
Appearance	White crystalline powder	Conforms
Assay (dry basis), %	≥98.5	99.98
Specific rotation,	+17°~+19°(C=8,in6NHCL)	+17.23°
Chloride (Cl), %	≤0.050	0.024
Iron. Fe"	≤10ppm	<10ppm
≤1ppm Arsenic (As <sub>2</sub> O <sub>3</sub> )		<0.5ppm
Sulfate (SO <sub>4</sub> )	≤0.02%	0.01%
Pb	≤1ppm	<1ppm
Loss on drying, %	≤0.30	0.13
Residue on ignition, %	≤0.10	0.06
L-Citrulline	62.5%~74.2%	66.18%
DL-Malate	25.8%~37.5%	33.20%
Yeast and Moulds	≤100cfu/g	Conforms
Total plate	≤1000cfu/g	Conforms
E.coil	Absence/g	Conforms
Salmonella	Absence/g	
Conclusion: This product conforms to requirements of Enterprise standard.		