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CERTIFICATE OF ANALYSIS

Date of issue: DEC.27, 2024

Description of product: L-ARGININE α-KETOGLUTARATE 1:1

Batch No. 20241007

Quantity: 300KGS

Manufacture date: OCT.22,2024

Re-test date: OCT.21,2026

Origin: Synthetics

Country of Origin: P.R.CHINA

PO 11846

Items	Specifications	Results
Description	White or off-white powder	White powder
Identification	HPLC retention time conform	Complies
Assay	98.0%~102.0%	99.35%
L-Arginine	52.5%~56.5%	54.53%
Alpha-Ketoglutaric Acid	43.5%~47.5%	44.82%
Specific rotation[α] _{D20}	+13.5°~+15.5°	+14.8°
PH	3.0~4.0	3.5
Heavy metals	≤10ppm	<10ppm
Arsenic (As)	≤1ppm	<1ppm
Lead (Pb)	≤2ppm	<1ppm
Cadmium (Cd)	≤1ppm	<1ppm
Mercury (Hg)	≤1ppm	<0.1ppm
Loss on drying	≤1.0%	0.19%
Residue on ignition	≤0.20%	0.1%
Particle Size	Through 30 mesh	Pass
Bulk density	0.4~0.55 g/ml	Complies
Tapped density	≥0.60 g/ml	Complies
Total Plate Count	≤1000cfu/g	Conforms
Yeast	≤100cfu/g	Conforms
Moulds	≤100cfu/g	Conforms
E. Coli	Negative	Negative
Salmonella	Negative	Negative
Chloride	≤0.05%	<0.05%
Iron (Fe)	≤0.003%	<0.003%
Melamine and its derivatives	Free	Free

Conclusion: Conform to the In-house Standard.