

## CERTIFICATE OF ANALYSIS

<b>Product Name</b>	L-Arginine- $\alpha$ -ketoglutarate 2:1		
<b>Quantity</b>	1000KGS		
<b>Batch Number</b>	20211229	<b>Manufacture Date</b>	20211229
<b>Report Date</b>	20211229	<b>Expiry Date</b>	20231228

Articles	Specifications	Results
Appearance	White to yellow crystalline power	White to yellow crystalline power
Assay	98.0%-102.0%	100.10%
Assay of L-Arginine	65.5%-69.0%	66.55%
Assay of $\alpha$ -ketoglutarate	26.5-29.0%	27.40%
Specific optical rotation [a] (8g/100ml 6N HCL)	+16.5o ~ +18.5o	+18.1o
pH(10% $H_2O$ )	5.5-7.0	6.0
Hydrate	$\leq 6.8$	6.1
Chloride	$\leq 0.05\%$	0.03%
Loss on drying	$\leq 1.0\%$	0.16%
Residue on ignition	$\leq 0.2\%$	0.10%
Heavy metals(as Pb)	$\leq 10\text{ppm}$	< 10ppm
Pb	$\leq 1\text{ppm}$	< 1ppm
Iron	$\leq 10\text{ppm}$	< 10ppm
Arsenic(AS $2O_3$ )	$\leq 1\text{ppm}$	< 1ppm
Cadmium	$\leq 1\text{ppm}$	< 1ppm
Mercury	$\leq 0.1\text{ppm}$	< 0.1ppm
Bulk density (g/ml)	$\geq 0.5$	0.53
Particle Size	Thus30	100%
Total plate count(cfu/g)	$\leq 1000\text{cfu/g}$	conforms
Yeast(cfu/g)	$\leq 100\text{cfu/g}$	conforms
Mold(cfu/g)	$\leq 100\text{cfu/g}$	conforms
Salmonella(cfu/g)	Negative	Negative
E.coli (cfu/g)	Negative	Negative
Staphylococcus Aureus (cfu/g)	Negative	Negative
Melamine and Melamine derivatives	Free	Free
<b>Conclusion: The test result of the above mentioned product meets house standard</b>		

**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.

