

Certificate of Analysis

Product Name	L-Alanine	Mfg. Date	2022.03.25
Batch No.	KN220325	Testing Date	2022.03.29
Batch Qty.	10000kg	Exp. Date	2024.03.24
Packing	25kg/drum	Reference Standard	USP32

Items	Specifications	Results
Assay	98.5% ~ 101.5%	99.7%
Appearance	White to off-white crystalline powder	White crystalline powder
Specific optical rotation [α] _{D20}	+13.7° ~ +15.1°	+14.5°
Chloride	≤0.05%	<0.05%
Sulfate	≤0.03%	<0.03%
Heavy metals	≤15ppm	<15ppm
Iron	≤0.003%	<0.003%
Residue on ignition	≤0.1%	0.05%
Loss on drying	≤0.2%	0.08%
pH value	5.0~7.0	6.2
Conclusion:	The product complies with USP32 Standard.	

Analyzed by: Xu Ke

Checked by: Yang Jinbo

Issued by: Wang Jie

