

# Shine Star (Hubei) Biological Engineering Co., Ltd.

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## CERTIFICATE OF ANALYSIS

Product Name:	L-Arginine Hydrochloride		
CAS No.:	1119-34-2		
Quantity:	1000kgs	Manufacture Date:	Jan 01, 2019
Batch No.:	53191001	Analysis Date:	Jan 11, 2019
Quality Standard:	USP33	Expiry Date:	Dec 31, 2020
Test Items	Limit	Result	
Appearance	white or almost white crystalline powder or colorless crystals	conform	
Identification	as per USP33	conform	
Specific rotation	+21.4° to +23.6°	+22.5°	
Loss on drying	not more than 0.2%	0.10%	
Residue on ignition	not more than 0.1%	0.04%	
Sulfate	not more than 0.03%	<0.03%	
Heavy metals	not more than 0.002%	<0.002%	
Chromatographic purity	as per USP33	conform	
Chloride content	16.5% to 17.1%	16.8%	
Assay	98.5% to 101.5%	99.67%	
Conclusion: The products conform to USP33 standard.			
Reported by: 陈燕		Verified by: 郭刚	
Storage: Preserve in well-closed containers.			