

## Certificate of Analysis

<b>General Information</b>			
Product Name	L-Cysteine HCL Monohydrate	QTY	1000kg
CAS No.	7048-4-6	Batch #	C23110807
Production date	2023-11-08	Expire date	2025-11-07
Issue Date	2023-11-15		
<b>Analysis</b>			
Item	Specification	Result	
Assay	99.0%~100.5%	99.5%	
Color and Appearance	White or off-white crystalline powder	Complies	
State of solution (Transmittance)	Clear and colorless ≥98.0%	99.2%	
pH	1.5~2.0	1.7	
Loss on Drying	8.5%-12.0%	11.60%	
Ash	≤0.10%	0.05%	
Specific Rotation	+5.5°~+7.0°	+6.2°	
Chloride	19.89%~20.29%	20.00%	
Sulfate	≤0.02%	<0.02%	
<b>Heavy Metals</b>			
Lead(Pb)	≤0.001%	Complies	
Iron (Fe)	≤0.001%	Complies	
Ammonium ( NH4)	≤0.02%	Complies	
<b>Microbiological</b>			
Total Plate Count	≤1,000cfu/g	Complies	
Fungi count	≤100cfu/g	Complies	
Yeast & Mold	≤100cfu/g	Complies	
E. Coli.	Negative	ND	
Salmonella	Negative	ND	
Package&Storage	Standard packed in fiber-drum outside and Food grade plastic bags inside. N.W: 25kgs, Size: 35x35xH51 cm.		
	Store in a cool,dry place away from Moisture, Light, Oxygen		
Manufacturer	Shaanxi Lifewe Bioengineering Co., Ltd.		

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