

# WUHAN SOLEADO TECHNOLOGY CO.,LTD

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## CERTIFICATE OF ANALYSIS

Product: L-Cysteine Hydrochloride Monohydrate		
Packing:25kgs net/drum		Manufacture Date: Mar 8 ,2013
Quality Standard:AJI92		Analysis Date: Mar 9,2013
Quantity:1000kgs		Expiry Date: Mar 7 ,2015
Batch No:1303067		CAS No: 7048-04-6
Item	Specification (AJI92)	Results
Description	White crystals or crystalline powder,strongly acid taste, very soluble in water	Conforms
Identification	Compare the infrared absorption spectrum of the sample with that of the starndard by potassium bromide disc method	Conforms
Specific rotation $[\alpha]_D^{20}$	+5.5° to +7.0°	+6.0°
state of solution (Transmittance)	Clear and colorless Not less than 98.0%	98.1%
Chloride(Cl)	19.89% to 20.29%	20.03%
Sulfate(SO <sub>4</sub> )	Not more than 0.020%	0.010%
Ammonium(NH <sub>4</sub> )	Not more than 0.02%	<0.02%
Arsenic(As <sub>2</sub> O <sub>3</sub> )	Not more than 1ppm	< 1ppm
Iron(Fe)	Not more than 10ppm	<10ppm
Heavy metals(Pb)	Not more than 10ppm	<10ppm
Other amino acids	Chromatographically Not detectable	Conforms
Loss on drying	8.5% to 12.0%	11.0%
Residue on ignition(sulfated)	Not more than 0.10%	0.06%
Assay	99.0% to 100.5%	99.6 %
PH	1.5 to 2.0	1.7

Conclusion :the product comply with the specification of AJI92

Analyst:Li qing/Chen xiaoqi

Verifier:Wang fen

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