

Certificate of Analysis

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Product	L-Histidine HCL Monohydrate	Batch Number	TNJ2015090530	
CAS No.	5934-29-2	Packing	25.00kg /drum	
M.F.	C6H9N5O2.HCI.H2O	MFG Date	June 30, 2015	
N.W.	5,000.00kg	Analysis Date	June 30, 2015	
G.W.	5,710.00kg	Retest Date	June 29, 2017	

<u>ltems</u>	<u>Specification</u>	<u>Results</u>
Appearance	White crystals or crystalline powder	Qualified
Specific Rotation [a]D200	+8.9 o to +9.5 o	+9.3 o
State of Solution	98.0% Min	98.3%
Chloride (Cl)	16.66% to 17.08%	16.9%
Ammonium (NH4)	0.02% Max	<0.02%
Sulfate (SO4)	0.02% Max	<0.02%
Iron (Fe)	10ppm Max	<10ppm
Heavy Metals (Pb)	10ppm Max	<10ppm
Arsenic (As2O3)	1ppm Max	<1ppm
Other Amino Acids	Conform	Qualified
Loss on Drying	0.2% Max	0.15%
Residue in Ignition	0.10% Max	0.05%
Assay	98.5% to 101.0%	99.7%
PH	3.5 to 4.5	4.0
	Appearance Specific Rotation [a]D20o State of Solution Chloride (Cl) Ammonium (NH4) Sulfate (SO4) Iron (Fe) Heavy Metals (Pb) Arsenic (As2O3) Other Amino Acids Loss on Drying Residue in Ignition Assay	AppearanceWhite crystals or crystalline powderSpecific Rotation [a]D200+8.9 o to +9.5 oState of Solution98.0% MinChloride (Cl)16.66% to 17.08%Ammonium (NH4)0.02% MaxSulfate (SO4)0.02% MaxIron (Fe)10ppm MaxHeavy Metals (Pb)10ppm MaxArsenic (As2O3)1ppm MaxOther Amino AcidsConformLoss on Drying0.2% MaxResidue in Ignition0.10% MaxAssay98.5% to 101.0%

Prepared byDong MeiChecked by WangTianyiApproved byLiu WuConclusionThe Quality of the above said is in conformity with AJI92 StandardImage: Conclusion of the above said is in conformity with AJI92 StandardImage: Conclusion of the above said is in conformity with AJI92 StandardImage: Conclusion of the above said is in conformity with AJI92 StandardStorageStored in dry and ventilation place, far from heat and water of CenterImage: Conclusion of the above said is in conformity with AJI92 StandardCOA IssuerQuality Control Team-Technology DepartmentImage: Conclusion of the above said is in conformity with AJI92 Standard