

Certificate of Analysis

Product :	L-Glutamine
Product no.:	PVGL001
Quality:	FCC IV
Production date:	25-08-2011
Expiry date:	24-08-2014
Batch no:	20110825
Quantity:	200 kg
Cas number:	56-85-9
Your reference:	
Your article code:	

Item s	Specification	Conclusion of Analysis
Appearance	Crystalline powder	Crystalline powder
Color	Whitish	Whitish
Aroma	None	None
Flavor	Slightly sweet	Slightly sweet
Assay	98.5 – 101.5%	98.6%
PH	4.5 – 6.0	4.42
Specific Rotation $[\alpha] D^{20^{\circ}C}$	+6.3° ~ +7.3°	+6.74°
HCL Solution		
Loss on drying	≤ 0.2%	0.10%
Heavy metals (lead)	≤ 5 PPM	≤ 5 PPM
Arsenic (As $_2SO_3$)	≤ 1 PPM	≤ 1 PPM
Ignited residue	≤ 0.1%	0.04%
Identification	USP Glutamine RS	Conform