## CERTIFICATION OF ANALYSIS

Product Name: L-Glutamine Manufacture Date: 2021.12.26

 Batch No.: 20211226
 Report Date: 2021.12.27

 Quantity: 1000KGS
 Expiry Date: 2023.12.25

Item	Specification	Result	
Description	White crystalline or crystalline powder	Conforms	
Identification	Concordant with the reference spectrum	Conforms	
Assay	98.5% to 101.5%	99.5%	
Specific rotation [ $\alpha$ ]D <sup>20</sup>	+ 6.3 to + 7.3°	+ 6.82°	
Loss on drying	Not more than 0.3%	0.17%	
Residue on ignition	Not more than 0.10%	0.05%	
Heavy metals	Not more than 15ppm	Conforms	
Lead	Not more than 3ppm	Conforms	
Arsenic(as As2o3)	Not more than 1ppm	Conforms	
Mercury	Not more than 0.1ppm	Conforms	
Cadmium	Not more than 1ppm	Conforms	
Organic volatile impurities	Meets the requirements	Conforms	
Bulk density	1	0.52g/cc	
Total Plate Count	Not more than 1000cfu/g	Conforms	
Yeast and Mould	Not more than 100cfu/g	Conforms	
E.Coli	Negative	Negative	
Salmonella	Negative	Negative	
S.aureus	Negative	Negative	
Conclusion :	The products Conforms to	The products Conforms to FCCVI	