



CERTIFICATE OF ANALYSIS

L-GLUTAMIC ACID

ITEM	SPECIFICATION	RESULT
1. Description:	white crystals or crystalline Powder Strongly acid taste	white crystals strongly acid taste
2. Specific rotation:	+31.5-+32.5	+31.9
3. State of solution:	Not less than 98.0%	98.80%
4. Chloride (Cl):	Not more than 0.02%	Less than 0.02%
5. Ammonium (NH ₄):	Not more than 0.02%	Less than 0.02%
6. Sulphate(SO ₄):	Not more than 0.02%	Less than 0.02%
7. Iron:	Not more than 10ppm	Less than 10ppm
8. Heavy metals:	Not more than 10ppm	Less than 10ppm
9. Arsenic (As ₂ O ₂):	Not more than 1ppm	Less than 1ppm
10. Other amino acids:	Not detectable	Not detectable
11. Loss on drying:	Not more than 0.1%	0.09%
12. Residue on ignition:	Not more than 0.1%	0.04%
13. Assay (on drying basis):	99.0-100.5%	99.90%
14. PH:	3.0-3.5	3.2