



## AnMar International Ltd.

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### SPECIFICATION SHEET L-Glutamine

Item Code: 303

Country of Origin: Korea

Updated: October 2012

Molecular Formula:  $C_5H_{10}N_2O_3$   
Molecular Weight: 146.14 g/mol

CAS No.: 56-85-9

#### TEST ITEMS


#### SPECIFICATIONS

#### TEST METHOD

Appearance	White crystals or crystalline powder	Visual
Identification	Conforms to standards	FCC/USP<197K>
Assay	98.5 - 101.5%	FCC/USP
Specific Rotation	+6.3° - +7.3°	FCC/USP<781S>
pH	4.5 - 6.0	pH meter
Loss on drying	≤0.3%	FCC/USP<731>
Residue on Ignition	≤0.1%	FCC/USP<281>
Chloride	≤0.05%	USP<221>
Sulfate	≤0.02%	USP<221>
Ammonium	≤0.005%	/
Heavy Metals	≤10 ppm	USP<231>Method I
Iron	≤10 ppm	USP<241>
Lead (Pb)	≤5 ppm	FCC
Arsenic (As)	≤1 ppm	/
Microbiology:		
Total aerobic plate count	≤1,000 cfu/g	/
Yeast & Mold	≤100 cfu/g	/
E. coli	Negative	/
Salmonella	Negative	/
Coliforms	Negative	/

Conclusion: This product conforms to FCCVI/USP32 specifications  
Shelf Life: 3 years  
Storage: Preserve in a well-closed container, protected from intense light, heat & moisture  
Packing: In cartons of 20 kgs

- Kosher certified

  
Gayathri Vasudevan  
Manager, Quality Assurance & Regulatory