

**GLUTAMINE (L) BIOTECH**  
**USP, GMP**  
**LGLM-6201**

$C_5H_{10}N_2O_3 \cdot 2H_2O$  F.W. 146.14 g/mol CAS# 56-85-9

**Intended for Use in Biopharmaceutical & Biotechnological Applications and Products**

L-Glutamine is synthesized and purified under full GMP conditions and meets compendial applications. L-Glutamine is used as a supplement energy source for certain types of mammalian cells and is used in other biopharmaceutical manufacturing applications.

**SPECIFICATIONS**

ANALYSIS	SPECIFICATIONS
Assay (dried basis) (USP)	98.5 % - 101.5 %
Appearance and Color (USP)	White crystals or crystalline powder
Chloride (USP)	≤ 0.05 %
Identification A (IR) (USP)	Passes Test
Iron (USP)	≤ 10 ppm
Loss on Drying (USP)	≤ 0.3 %
Optical Rotation, Specific Rotation @ 20°C (USP)	+6.3° to +7.3°
Residue on Ignition (USP)	≤ 0.1 %
Related Compounds (USP)	≤ 0.5 %
Sulfate (USP)	≤ 0.03 %

### **General Product Description:**

Molecular Formula:  $C_5H_{10}N_2O_3 \cdot 2H_2O$

Molecular Weight: 146.14 g/mol

CAS Number: 56-85-9

### **L-Glutamine Biotech:**

- Appears as a white crystalline powder
- Is manufactured under an ISO Quality Managed cGMP System
- Manufactured in an enzyme free, hormone free and animal free environment
- Has no known major food allergens (as defined by FDA and WHO)
- The final product nor its raw materials are not derived from nor come into contact with animals, animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: (S)-2,5-Diamino-5-oxopentanoic acid, L- Glutamic acid 5-amide.

### **Shelf Life Policy:**

Three-year expiry from the date of manufacture.

### **Storage and Shipping Conditions:**

Please refer to the SDS for storage and shipping conditions.

### **Package Size:**

100g, 500g, 1kg, 5kg, 10kg, 25kg, 50kg