

# L-GLUTAMINE

## BIOTECH, MEETS USP, GMP

### BIO QUALIFIED GRADE / LGLM-6201

$C_5H_{10}N_2O_3$      $\Delta$     F.W. 146.14 g/mol     $\Delta$     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. It is used as a supplement energy source for certain types of mammalian cells and is used in other biopharmaceutical manufacturing applications.

#### SPECIFICATIONS

ANALYSIS	SPECIFICATIONS
Appearance and Color	White Crystals or Crystalline Powder
Assay, Dried Basis	98.5 – 101.5%
Chloride	$\leq 500$ ppm
Identification A, IR	Conforms to Reference Standard
Iron	$\leq 10$ ppm
Loss on Drying	$\leq 0.3$ %
Optical Rotation, Specific Rotation @ 20°C	+6.3° to +7.3°
Residue on Ignition	$\leq 0.1$ %
Related Compounds	$\leq 0.5$ %
Sulfate	$\leq 300$ ppm

### **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