

TECHNICAL DATA SHEET

L-Glutamine

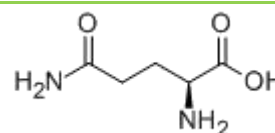
FCCVI

Chemical Properties

Chemical Formula: C₅H₁₀N₂O₃

Molecular Weight: 146.14

CAS: 56-85-9



Description

L-Glutamine is the most prevalent amino acid in the bloodstream. It is used in the gut and immune system extensively to maintain optimal performance. 60% of free-form amino acids floating in skeletal muscles is L-glutamine. When supplemented, it may help you reduce the amount of muscle deterioration that occurs because other tissues that need glutamine will not rob the glutamine stored in the muscle cells.

Solubility

It is soluble in water and practically insoluble in alcohol and in ether.

Specification

Item	Specification	Test Method
Appearance	White crystal or crystalline powder	Visual
Identification	In accordance with the IR absorption spectrum of the standard	FCCVI
Assay	98.5% ~ 101.5%	Titration, FCCVI
pH	4.5~6.0	In-house
Specific rotation [α] _D ²⁰	+6.3~+7.3°	FCCVI
Loss on drying	Max 0.20%	FCCVI
Residue on ignition	Max 0.10%	FCCVI
Particle size	Min 98% through 100mesh	In-house
Chloride	Max 0.05%	In-house
Sulphates	Max 0.03%	In-house
Iron	Max 10ppm	In-house
Heavy Metals	Max 10ppm	In-house
Lead	Max 3ppm	FCCVI
Arsenic	Max 1ppm	In-house
Cadmium	Max 1ppm	In-house
Mercury	Max 0.1ppm	In-house
Bulk density	Min 0.5g/ml	In-house

Total Plate Count	Max 1,000cfu/g	In-house
Mold & Yeast	Max 100cfu/g	In-house
<i>E. Coli</i>	Negative/10g	In-house
<i>Salmonella</i>	Negative/25g	In-house
<i>Staphylococcus aureus</i>	Negative/10g	In-house

Ingredients

Pure L-Glutamine.

Functions

- 1), Protein Syntheses;
- 2), Regulation of acid-based balance in the kidney by producing ammonium;
- 3), Cellular energy;
- 4), Nitrogen donation for many anabolic processes;
- 5), Carbon donation for refilling the citric acid cycle;
- 6), Nontoxic transporter of ammonia in the blood;

Applications

L-Glutamine is used as pharmaceutical intermediate. Medicines used for treatment of digestive ulcer, alcohol poisoning and improve brain function.

L-Glutamine is used as flavor enhancer.

L-Glutamine is used as nutritional supplement.

L-Glutamine is also used in biochemical research.

Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

Handling recommendations

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation.

Packaging, Storage & Shelf Life

Package	25kg/drum; or according to customers' requirements.
Storage	Store in a well-closed container away from moisture and direct sunlight.
Shelf life	2 years if sealed and stored properly.