

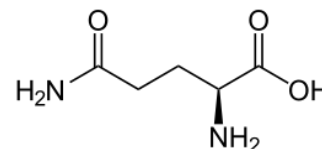
# L-GLUTAMINE

## USP 39

PARAMETER	LIMIT
Appearance: White or nearly white crystalline powder	passes
Identity	passes
Specific optical rotation (on dry basis) (4.0 % (m/V) in H <sub>2</sub> O at 20°C [ $\alpha$ ] <sub>D</sub> <sup>20</sup> )	+6.3° to +7.3°
Related substances (TLC)	passes
Chlorides	≤ 500 ppm
Sulphates	≤ 300 ppm
Iron	≤ 30 ppm
Loss on drying	≤ 0.3 %
Residue on ignition	≤ 0.3 %
Assay (on dry basis)	98.5 to 101.5 %
Total viable aerobic count	≤ 100 CFU/g
Moulds and yeasts	≤ 10 CFU/g
Salmonella	In 10 g n.d.
<i>Escherichia coli</i>	In 10 g n.d.
<i>Pseudomonas aeruginosa</i>	In 10 g n.d.
<i>Staphylococcus aureus</i>	In 10 g n.d.

### CHEMICAL DATA

Formula: C<sub>5</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>  
CAS Number: 56-85-9



### PACKAGING

25 kg Unit  
Outer container: Fiber drum  
Outer liner: HDPE  
Inner liner: LDPE

### STORAGE

Dry and dark at room temperature in tightly closed container

### STABILITY

Product is stable for 2 years from date of production if stored under recommended conditions in original packaging.