

## Technical Information

**L-Glutamine 200mM Solution, 100X**  
L-Glutamine in 0.85% normal saline  
Cell Culture Tested, Sterile filtered

### Product Code:TCL1012

**Molecular Weight:** 146.15

**Molecular Formula:**  $C_5H_{10}N_6O_3$

**CAS number:** 56-85-9

L-glutamine is an essential amino acid required by all mammalian and insect cells grown in culture. It functions as an additional source of carbon and energy and in particular is utilized for nucleic acid synthesis. L-glutamine is extremely sensitive to pH and temperature. L-glutamine degrades relatively rapidly in stock solutions or liquid media. Hence we recommend addition of L-glutamine to media prior to use.

TCL1012 is sterile filtered L-glutamine solution prepared in 0.85% normal saline.

### Methodology

1. Remove TCL1012 from the freezer and keep it at room temperature for 30 minutes.
2. To ensure complete thawing, place it in a 37°C water bath. Agitate the bottle every 5 - 10 minutes.
3. Remove the bottle from water bath as soon as it is completely thawed.

**Note:**

Incomplete thawing will lead to precipitation or flocculation of material in the solution. Hence it is recommended to warm the solution at 37°C to complete the thawing process. Do not leave the bottle at 37°C for longer times than necessary. Degradation process of L-glutamine increases significantly at warmer temperatures.

### Quality control

**Appearance**

Colorless, clear solution.

**pH**

7.00 -7.60

**Sterility**

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

**Cultural Response**

Growth Promotion Test.

**Osmolality in mOsm/Kg H<sub>2</sub>O**

440.00 -480.00

**Endotoxin Content**

NMT 1EU/ml

### Storage and Shelf Life

Store at -20°C. Multiple freeze thaw cycles may result in reduction of activity. For longer storage, we recommend that aliquots be taken aseptically in sterile containers after the first thawing. Once the product has been opened and refrigerated, the maximum shelf life is about 2 weeks. Shelf life of the product is 24 months. Use before expiry date given on the product label.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.