

**L(+)- Glutamine 100X, 200mM**

**CAT N°** : X0550

**Theoretical pH** : 5±1

**Osmolality** : 200 ± 50 mOsm/kg

**Colour** : colourless (weight when frozen)

**Storage conditions** : Frozen / Freeze again after using at -20°C

**Shelf life** : 24 month

**Sterility tests** :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Endotoxin** : <10 EU/ml

**Cell growth test** : Medium tested for the ability to support L929 cell growth.

**Composition** : Displayed on website ; also available on request

**Recommended use** :

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- In order to preserve all product qualities, it is recommended to thaw out the flask, to aliquote, then to re-freeze the produced flasks rather than to thaw out and re-freeze the flask at each use.
- It is recommended to use the product immediately after its thaw out.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

**Application** :

L-Glutamine is an essential amino acid required by all mammalian and insect cells for their culture. It is a crucial component of many cell culture media and serves as a major energy source for cells in culture.

L-Glutamine is very stable as a dry powder and as a frozen solution. However, in liquid media or stock solutions, L-Glutamine can degrade relatively rapidly. L-Glutamine is also more labile in cell culture solution than other amino acids. Optimal cell performance usually requires supplementation to the media with 2-8 mM L-Glutamine prior to use.

Please note, L-Glutamine degradation results in a build up of ammonia which could have a deleterious effect on some culturing systems.

**Utilisation :**

1. Remove product from the freezer and allow it to sit at room temperature for thirty minutes.
2. Thaw the product completely in a 37°C water bath. Agitate every 15-20 minutes to avoid concentration gradients. Remove L-Glutamine from water bath as soon as it is completely thawed.
3. Supplement cell culture medium with appropriate volume of L-Glutamine to achieve desired concentration. L-Glutamine (CAT N° : X0550) is supplied as 200mM (29.23mg/ml) solution.

**Indications of deterioration :**

L-Glutamine should be clear of particulates and flocculent material after warming to 37°C.

Do not use if L-Glutamine is cloudy or contains precipitate.

Other evidence of deterioration may include colour change, as well as, degradation of physical or performance characteristics.