

PRODUCT DATA SHEET

L-Glutamine

Description

L-Glutamine is an essential amino acid required as an energy and carbon source by virtually all mammalian and insect cells in culture. L-Glutamine is very stable as a dry powder and as a frozen solution. However, L-glutamine is more labile in solution than other amino acids when stored above freezing. The rate and extent of L-glutamine degradation are dependent on time, storage temperatures and pH. Supplementation of cell culture media with L-glutamine prior to use is frequently required.

Preparation Instructions

1. Prepare a stock solution from which working concentrations may easily be obtained. Determine the amount of L-glutamine powder and water necessary to make the stock solution; a 200mM (29.2g/L) solution is often a convenient choice due to its simple dilution to working concentrations.
2. Use 0.85% saline at ambient temperature (15°C to 30°C). To 90% final volume of saline, add the required quantity of L-glutamine powder while stirring. Stir until the powder is completely dissolved.
3. Add the required amount of 0.85% saline to bring the solution to final volume.
4. Immediately filter sterilize and dispense aseptically into a sterile collection vessel. Filters with an absolute pore size of 0.1µm - 0.2µm are most appropriate for this application. Dispense small aliquots into containers appropriate for freezing. This prevents the freeze-thaw process of large quantities when thawing for media supplementation or other use. A sterility test prior to use is recommended.
5. Store the L-glutamine solution at -5°C to -20°C.

Precautions

The L-glutamine powder is hazardous. Review the Material Safety Data Sheet for additional information before handling this product.

Storage and Handling

We recommend that the L-glutamine powder be stored at a temperature of 15°C to 30°C.

Shipping

The L-glutamine powder is shipped ambient by second day air.

This product is manufactured for research and development purposes only. It is not intended for any human or animal diagnostic, therapeutic or other clinical uses. It is also not for agricultural, food, drug, cosmetic or household use. The use of these products must be supervised by a person technically qualified to handle potentially hazardous material.