

PRODUCT DATA SHEET

Penicillin-Streptomycin Solutions

Description

This antibiotic mixture contains penicillin and streptomycin. Penicillin is an anti-bacterial agent produced by *Penicillium*. It interferes with the final stage of bacterial cell wall synthesis, the cross-linking of different peptidoglycan strands. Streptomycin is an anti-bacterial agent produced by *Streptomyces*. It binds to the 30S subunit of the bacterial 70S ribosome and blocks the initiation complex of protein synthesis. The antimicrobial spectrum for Penicillin-Streptomycin Solutions includes gram-positive and gram-negative bacteria.

Penicillin-Streptomycin Solutions are supplied in 0.85% saline and are available in 2 concentrations. The Penicillin-Streptomycin 5/5 Solution contains 5,000 units/ml penicillin (base) and 5,000 µg/ml streptomycin (base). The Penicillin-Streptomycin 10/10 Solution contains 10,000 units/ml penicillin (base) and 10,000 µg/ml streptomycin (base),

Product Use

The recommended use concentration for these antibiotic solutions in culture media is 10 ml/L. Individual cell lines may react differently to the toxic effects of this product; therefore, the optimal use dosage must be determined empirically for each cell line used. Penicillin-Streptomycin Solutions should be tested on the target cell line at multiple concentrations in order to evaluate cell line tolerance to the product. Cells should be observed daily for signs of toxicity such as rounding, loss of confluency, or vacuole formation.

Precautions

These antibiotic solutions are hazardous. Review the Material Safety Data Sheet for additional information before handling this product.

Storage and Handling

The Penicillin-Streptomycin Solutions are supplied in gamma irradiated, sterile PETG or PETE bottles. We recommend that the antibiotic solutions are stored frozen at a temperature of -5°C to -20°C. Always use aseptic techniques when handling antibiotic solutions.

Shipping

The Penicillin-Streptomycin Solutions are shipped frozen by next day air in insulated containers packed with dry ice.

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.