

# PRODUCT DATA SHEET

## Antibiotic-Antimycotic Solution

### Description

This antibiotic mixture contains Penicillin, Streptomycin and Amphotericin B and is effective against the most common forms of cell culture contamination. 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. Amphotericin B is an anti-fungal agent produced by *Streptomyces*. It interferes with the permeability of cell membranes of sensitive fungi and yeast. Amphotericin B forms a complex with cholesterol and causes leakage of low molecular weight substances from the cells.

This antibiotic mixture is supplied in 0.85% saline. The solution contains 10,000 units/ml Penicillin (base), 10,000 µg/ml Streptomycin (base), and 25 µg/ml Amphotericin B.

### Product Use

The recommended use concentration for this antibiotic solution 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. Antibiotic-Antimycotic Solution 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

This antibiotic solution is hazardous. Review the Material Safety Data Sheet for additional information before handling this product.

### Storage and Handling

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

### Shipping

The Antibiotic-Antimycotic Solution is 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.*