



# **Technical Datasheet**

# **Antibiotic Solution 50X liquid**

With 5000 U Penicillin and 5mg/ml Streptomycin in 0.9% normal saline

**Product Code: A003** 

## **Product Description:**

Penicillin and streptomycin are broad spectrum bacteriostatic and bacteriocidal agents effective against gram positive bacteria and gram negative bacteria. Penicillin acts by inhibiting cell wall synthesis. Streptomycin blocks the initiation complex of protein synthesis by binding to the 30S subunit of bacterial 70S ribosome, thus interfering with the protein synthesis.

A003 is sterile filtered solution formulated to contain 5,000 units penicillin and 5mg streptomycin per ml.

#### **Directions:**

Recommended use concentration is 20ml/L. Sensitive cell lines may react differently to this product. Hence it is recommended to determine optimum usage dose empirically for individual cell line.

## **Quality Control:**

### **Appearance**

Colorless, clear solution.

#### pН

5.60 - 6.20

## Osmolality in mOsm/Kg H2O

300.00 - 340.00

# Sterility

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

#### **Penicillin Concentration**

5,000 U/ml

# **Streptomycin Concentration**

5mg/ml

#### **Cultural Response**

- 1. No toxicity to cells.
- 2. Antibiotic sensitivity test

#### **Endotoxin Content**

NMT 0.5EU/ml

### **Storage and Shelf Life:**

Store at -30°C to -10°C.

Repeated freezing and thawing should be avoided. Once thawed, remaining portion can be aseptically dispensed into sterile container and frozen for future use. Solution is stable for 3 days at 37°C and for approximately 2 to 3 weeks at 2 - 8°C.

Shelf life of the product is 24 months.

Use before expiry date given on the product label.

Disclaimer: Revision: 03/2025

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ Publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories 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 use only, unless otherwise specified. 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.

