

Technical Information

Polymyxin B Solution

With 50mg/ml Polymyxin B in sterile tissue culture grade water
Suitable for Vaccine Production

Product Code: A01027

Application:-

Molecular Weight: 1385.61

Molecular Formula: C₅₅H₉₆N₁₆O₁₃. 2H₂SO₄

CAS No: 1405-20-5

Polymyxin B sulfate, a polypeptide antibiotic, is the sulfate salt of polymyxin B1 and B2 produced by the growth of *Bacillus polymyxa*. They are basic polypeptides of about eight amino acids and have cationic detergent action on the cell membrane. Polymyxin B sulfate has bactericidal action against Gram- negative bacteria. It alters the cytoplasmic permeability by binding to negatively charged site in the lipopolysaccharide layer which has electrostatic attraction for the positively charged amino groups in the cyclic peptide portion. International unit of polymyxin B is defined as the activity contained in 0.000119mg of the second International Standard (1969) of polymyxin B sulphate which contains 8403 units per mg. In cell culture, polymyxin B sulfate is used as an anti-bacterial agent to prevent contamination.

A01027 is sterile filtered solution formulated to contain 50mg/ml Polymyxin B sulfate per ml. It is suitable for use in vaccine production.

Methodology

Recommended use concentration is 1ml/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.

pH

5.60 -6.60

Osmolality in mOsm/Kg H₂O

30.00 -70.00

Sterility

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

Polymyxin B Concentration

50 mg/ml

Cultural Response

1. No toxicity to cells.
2. Antibiotic sensitivity tes

Endotoxin Content

NMT 0.5EU/ml

Storage and Shelf Life

Store at 2 - 8°C.

Shelf life of the product is 18 months.

Use before expiry date given on the product label.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House 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 of diagnostic reagents extra.
- 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.
- Do not use the products if it fails to meet specifications for identity and performance parameters.