



# Technical Data

## Antibiotic Assay Medium No.12 (Nystatin Assay Agar)

M280

### Intended Use:

Recommended for microbiological assay of Amphotericin B and Nystatin using *Saccharomyces cerevisiae* ATCC 2601.

### Composition\*\*

Ingredients	Gms / Litre
Peptone	10.000
Sodium chloride	10.000
Dextrose (Glucose)	10.000
HM peptone B #	2.500
Yeast extract	5.000
Agar	25.000
Final pH ( at 25°C)	6.1±0.2

\*\*Formula adjusted, standardized to suit performance parameters

# Equivalent to Beef extract

### Directions

Suspend 62.5 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C.

### Principle And Interpretation

This medium is prepared from the Groove and Randall formula (1)Antifungal antibiotics like Amphotericin B and Nystatin can be assayed using this medium.

Ingredients like peptone, yeast and HM peptone B supplements essential nutrients, minerals and growth factors for the growth of test organism. Dextrose in the medium provides enhanced source of carbon and energy. Osmotic equilibrium in the medium is by sodium chloride which maintain the cell integrity and viability. Freshly prepared plates should be used for antibiotic assays.

### Type of specimen

Pharmaceutical samples.

### Specimen Collection and Handling:

Test organisms are inoculated in sterilised agar pre-cooled to 40-45°C and spread evenly over the surface of solidified base agar. Prediffusion of antibiotics for 10-20 mins in the agar by incubating at temperature below the optimal growth temperature for microorganism would facilitate better diffusion of antibiotics followed by incubation of plates for microbial growth.

### Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations :

1. Freshly prepared plates must be used or it may give erroneous results.

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

