

TMV 023 – ANTIBIOTIC ASSAY MEDIUM NO. 12 (NYSTATIN ASSAY AGAR) (VEG.)

INTENDED USE

For microbiological assay of Amphotericin B & Nystatin using *Saccharomyces cerevisiae*.

PRODUCT SUMMARY AND EXPLANATION

Antibiotic Veg Assay Medium No.12 (Nystatin Veg Assay Agar) is prepared incorporating vegetable peptones in place of animal peptones, making the medium BSE-TSE risks free. It can be used for the same purpose of Antibiotic Assay Medium No.12 (Nystatin Assay Agar). This medium is prepared from the Groove and Randall formula. Antifungal antibiotics like Amphotericin B and Nystatin can be assayed using this medium.

Freshly prepared plates should be used for antibiotic assays. 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 minutes 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.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	10.000
Sodium chloride	10.000
Dextrose	10.000
Veg extract	2.500
Yeast extract	5.000
Agar	25.000

PRINCIPLE

Ingredients like Veg peptone, yeast extract and Veg extract 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.

INSTRUCTION FOR USE

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

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
<i>Saccharomyces cerevisiae</i>	2601	50-100	Luxuriant	>=70%	Amphotericin B, Nystatin	25-30°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative MedNet GmbH Borkstrasse 10, 48163 Münster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019