

## TMV 661 – ANTIBIOTIC ASSAY MEDIUM NO. 41 (VEG.)

### INTENDED USE

For the microbiological assay of Thiostrepton using *Streptococcus faecium* as the test organism.

### PRODUCT SUMMARY AND EXPLANATION

Antibiotic Veg Assay medium No. 40 is prepared by incorporation of vegetable peptones in place of animal peptones, making the medium, BSE-TSE risks free. This medium can be used for the same purpose of Antibiotic Assay Medium No. 41. It is recommended for turbidimetric microbiological assay of thiostreptone, a polypeptide antibiotic. Grove and Randall have elucidated the antibiotic assays and media in their comprehensive treatise on antibiotic assays.

Turbidimetric antibiotic assay is based on the change or inhibition of growth of test microorganisms in a liquid medium containing a uniform concentration of an antibiotic. After incubation of the test organism in the working dilutions of the antibiotics, the amount of growth is determined by measuring the light transmittance using spectrophotometer. The concentration of antibiotic is determined by comparing amounts of growth obtained with that is given by the reference standard solutions. Use of this method is appropriate only when test samples are clear.

### COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	9.000
Dextrose	20.000
Yeast extract	5.000
Sodium citrate	10.000
Monopotassium phosphate	1.000
Dipotassium hydrogen phosphate	1.000

### PRINCIPLE

Essential amino acids, mineral and growth factors are supplied by Veg hydrolysate and yeast extract in this medium. Dextrose provides carbon and energy source for enhancing the growth of test organism. Good buffering action is maintained by phosphates in the medium. Sodium citrate provides additional source of carbon and energy and promote enhanced growth of the test organism.

### INSTRUCTION FOR USE

- Dissolve 46.0 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Light yellow coloured clear solution.
<b>pH (at 25°C)</b>	: 6.8±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Serial dilution with	Incubation Temperature	Incubation Period
<i>Enterococcus hirae</i>	10541	50-100	Luxuriant	Thiostrepton	35-37°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.
2. United States Pharmacopoeia 2011, USP 34/ NF 29, US Pharmacopoeial Convention Inc, Rockville, MD.

 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 Buckstrasse 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  
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