TMV 660 – ANTIBIOTIC ASSAY MEDIUM NO. 40 (VEG.)

INTENDED USE

For microbiological assay of Thiostrepton using *Streptococcus faecium*.

PRODUCT SUMMARY AND EXPLANATION

Antibiotic Veg Assay Medium No. 40 is prepared by incorporating vegetable peptones in place of animal peptones, making the medium BSE TSE risks free. This can be used for the same purpose of Antibiotic Veg Medium No. 40, This medium is used as a maintenance medium for test organism *Enterococcus hirae* ATCC 10541 (*Streptococcus faecium*) used for in the assay of Thiostrepton. Equivalent animal based medium is in accordance with USP.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	20.000
Veg Peptone	2.500
Veg hydrolysate	2.500
Dextrose	10.000
Potassium dihydrogen phosphate	2.000
Polysorbate 80	0.100
Agar	10.000

PRINCIPLE

Essential amino acids, mineral and growth factors are supplied by Peptone, Veg hydrolysate and yeast extract in this medium. Dextrose functions as carbon and energy source for enhancing the growth of test organism. During maintenance of the test organism, good buffering action is maintained by phosphates in the medium. Incorporation of polysorbates reduces the surface tension, maintaining uniform suspension of cells and also can neutralize phenolic compounds in the test sample, if any.

INSTRUCTION FOR USE

- Dissolve 47.1 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. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates or as desired

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 6.7±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

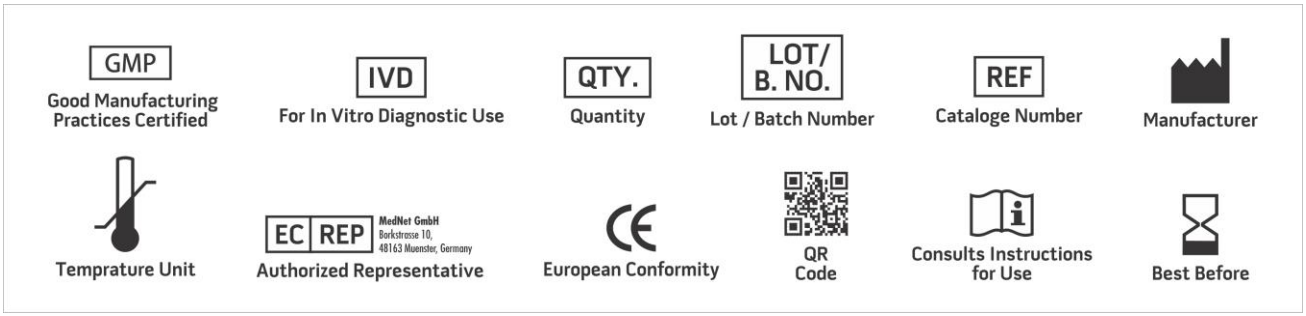
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
Enterococcus hirae	10541	50-100	Luxuriant	>=70%	Thiostrepton	35-37°C	18-24 Hours

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. United States Pharmacopoeia 2011, USP 34/NF 29, US Pharmacopoeial Convention, Inc., Rockville, MD.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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