Technical Information

M- Enterococcus MiVeg Agar Base

Product Code : VM2108

Application:- M-Enterococcus MiVeg Agar Base is a selective medium recommended for membrane filtration procedures as well as a direct plating medium, for isolation and enumeration of *Enterococci* in water, sewage, food or other materials.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	15.0
Papaic digest of soyabean meal	5.0
Yeast extract	5.0
Dextrose	2.0
Dipotassium phosphate	4.0
Sodium azide	0.4
Triphenyl tetrazolium chloride	0.1
Agar	10.0
Final pH (at 25°C)	7.2±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

M-Enterococcus MiVeg Agar Base is prepared by using MiVeg hydrolysate in place of Casein enzymic hydrolysate which makes the medium BSE/TSE risks free. This medium is the modification of M-Enterococcus Agar Base developed by Slanetz et al (1). Slanetz and Bartley (2) modified it by the addition of Triphenyl Tetrazolium Chloride (TTC) and found that this medium proved to be superior to membrane filtration medium for enumeration of *Enterococci*. By incubating the inoculated membranes directly on the agar surface, increased recovery and larger colonies were obtained than on the pads saturated with liquid medium. Burkwell and Hartman (3) used polysorbate 80 (0.5 ml/liter) and sodium carbonate (2 ml of a 10% aqueous solution per liter) to increase sensitivity for direct plating of foods and increasing colony size (4).

This medium contains MiVeg hydrolysate and Papaic digest of soyabean meal, yeast extract, dextrose which provides carbon, nitrogen and other essential growth nutrients. Sodium azide inhibits gram- negative organisms. TTC act as a rapid indicator of bacterial growth which is reduced to insoluble formazan inside the bacterial cells which results in red coloured colonies.

Methodology

Suspend 41.5 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. DO NOT OVERHEAT OR AUTOCLAVE. Add 0.5 ml polysorbate 80 and 2 ml of 10% aqueous solution of sodium carbonate, if desired. Dispense into petriplates.

Warning : Sodium azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.0% Agar gel.

Colour and Clarity of prepared medium

Very light pink coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.15 % w/v aqueous solution pH: 7.2 ±0.2 at 25°C

pH range

7.0-7.4

Cultural Response/Characteristics

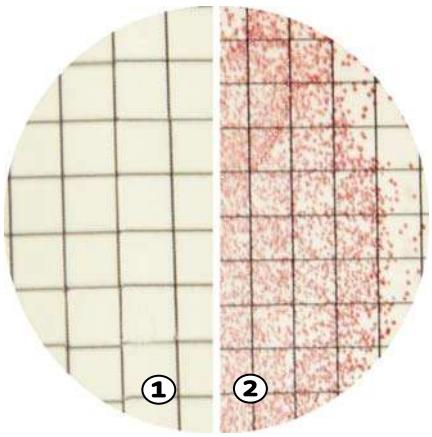
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony*
Enterococcus faecalis (29212)	10-100	luxuriant	inhibited
Escherichia coli (25922)	10^3	inhibited	-

Key : * = on membrane filter

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 days.



VM2108 M-Enterococcus MiVeg Agar Base

1. Control
2. *Enterococcus faecalis*

Further Reading

1. Slanetz, Bent and Bartley, 1955, Publ. Health. Rep., 70:67.
2. Slanetz and Bartley, 1957, J. Bact., 74:591.
3. Burkwell and Hartman, 1964, Appl. Microbiol., 12:18.
4. MacFaddin J F., 1985, Media for Isolation- Cultivation-Identification - Maintenance of medical bacteria, Vol. 1, Williams and Wilkins, Baltimore

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform 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 in fingement of any patents.Do not use the products if it fails to meet specificatons for identity and performens parameters.