

M-Enterococcus HiVeg™ Agar Base**MV1108**

M-Enterococcus HiVeg Agar Base is a selective medium used in 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	Grams/Litre
HiVeg 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.

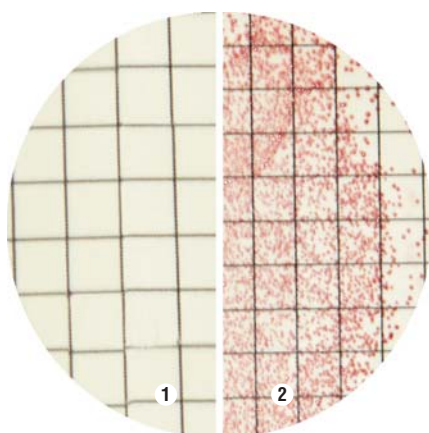
Directions :

Suspend 41.5 grams in 1000 ml distilled water. 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.

Principle and Interpretation :

M-Enterococcus HiVeg Agar Base is prepared by using HiVeg hydrolysate instead of Casein enzymic hydrolysate thus making 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 membrane filtration medium for enumeration of *Enterococci*. Increased recovery and larger colonies were obtained by incubating the inoculated membranes directly on the agar surface instead of on pads saturated with liquid medium. Burkwell and Hartman (3) used polysorbate 80 (0.5 ml/liter) and



MV1108 M-Enterococcus HiVeg Agar Base

1. Control
2. *Enterococcus faecalis*

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV1108 HiVeg hydrolysate	M1108 Casein enzymic hydrolysate

Recommended for : Isolation and enumeration of *Enterococci* in water, sewage, food or other materials.

Reconstitution : 41.5 g/l

Quantity on preparation (500g): 12.04 L

pH (25°C) : 7.2 ± 0.2

Supplement : Polysorbate 80 and sodium carbonate solution, if desired

Sterilization : Boiling (DO NOT AUTOCLAVE).

Storage : Dry Medium - Below 30°C, Use freshly prepared medium.

sodium carbonate (2 ml of a 10% aqueous solution per liter) to increase sensitivity for direct plating of foods and increasing colony size (4).

HiVeg hydrolysate and Papaic digest of soyabean meal, yeast extract, dextrose act as source of carbon, nitrogen and other essential growth nutrients. Sodium azide inhibits gram-negative organisms. TTC serves as a rapid indicator of bacterial growth which is reduced to insoluble formazan inside the bacterial cells and gives red colouration to colonies.

Quality Control :**Appearance of powder**

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

Gelling

Firm, comparable with 1.0% Agar gel.

Colour and Clarity

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

Reaction

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

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony*
<i>Enterococcus faecalis</i> (29212)	10-100	luxuriant	pink - maroon
<i>Escherichia coli</i> (25922)	10 ³	inhibited	-

Key : * = on membrane filter

References :

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 JF., 1985, Media for Isolation-Cultivation-Identification - Maintenance of medical bacteria, Vol. 1, Williams and Wilkins, Baltimore.