M-Azide HiVeg™ Broth Base MV1119

M-Azide HiVeg Broth Base is a selective medium used for cultivation and enumeration of *Enterococci* from water samples using membrane filter technique.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate No. 1	40.0
Yeast extract	10.0
Dextrose	2.0
Saccharose	100.0
Dipotassium phosphate	4.0
Sodium azide	0.4

Final pH (at 25°C) 7.1 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 15.64 grams in 100 ml distilled water. Heat, if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add 1 ml of 1% 2,3,5 Triphenyl Tetrazolium Chloride (TTC solution 1%, FD057). Mix well before dispensing.
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-Azide HiVeg Broth Base is prepared by using HiVeg hydrolysate No.1 instead of Tryptose which makes the medium free of BSE/TSE risks. M-Azide HiVeg Broth Base is the modification of M-Azide Broth Base which was formulated by Slanetz, Bent and Bartely (1) and was especially recommended for the enumeration of *Enterococci* from water samples and other specimens. HiVeg hydrolysate No.1, yeast extract provide essential growth nutrients. Dextrose and sucrose are the fermentable carbohydrates. Sodium azide is used as a selective agent, which inhibits gram-negative bacteria. Mallmann, Botwright and Churchill (2) reported that sodium azide exerts bacteriostatic effect on gram-negative bacteria allowing unrestricted growth of gram-positive cocci, particularly *Enterococci*. TTC imparts pink to red colour to the colonies. For membrane filter technique (3), 2.2 ml medium is added per absorbent pad. Using this medium Slanetz et al observed better recovery of pure cultures of *Enterococcus faecalis* by membrane filter technique than MPN technique.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV1119 HiVeg hydrolysate No. 1	**M1119** Tryptose

Recommended for	:	Cultivation and enumeration of *Enterococci* from water samples using membrane filter technique
Reconstitution	:	156.4 g/l
Quantity on preparation (500g)	:	3.19 L
pH (25°C)	:	7.1 ± 0.2
Supplement	:	TTC Solution (FD057)
Sterilization	:	121°C / 15 minutes.

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Quality Control :

Appearance of powder
Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Colour and Clarity
Light yellow coloured, clear solution without any precipitate.
Reaction
Reaction of 15.64% w/v aqueous solution is pH 7.1 ± 0.2 at 25°C.
Cultural Response
Cultural characteristics observed after an incubation at 35 - 37°C for 48 hours on addition of 1% TTC (FD057)

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony*
Enterococcus faecalis (29212)	10^2-10^3	luxuriant	pink - red
Escherichia coli (25922)	10^2-10^3	inhibited	-

Key : * = On membrane filter

References :

1. Slanetz L.W., Bent D.F. and Bartley C.H. 1955, Pub. Hlth. Rep., 70:67.
2. Mallmann, Botwright and Churchill, 1941, J. Inf. Dis., 69:215
3. MacFaddin J.F., 1985, 'Media for Isolation-Identification-Cultivation-Maintenance of Medical Bacteria', vol - 1, Williams and Wilkins, Baltimore.

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.