M-Endo HiVeg™ Broth MV1107

M-Endo HiVeg Broth is used for estimation of coliforms in water samples using membrane filter technique.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	20.0
Yeast extract	6.0
Lactose	25.0
Dipotassium phosphate	7.0
Basic fuchsin	1.0
Sodium sulphite	2.5

Final pH (at 25°C) 7.5 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 61.5 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 5 minutes. Cool and use as required in membrane filtration technique. The medium should be used on the same day of its rehydration.
Caution : Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

Principle and Interpretation :

M-Endo HiVeg Broth is prepared by using HiVeg peptone which is free of BSE/TSE risks associated with animal based peptones. M-Endo HiVeg Broth is the modification of M-Endo Broth which was used for studying milk lines of milk handling equipment (1) and for examination of swimming pool waters (2) using membrane filter technique. This medium, like the conventional medium gives higher counts and is most satisfactory of the many media used since colonies of coliform bacteria, develop rapidly (3). Preliminary enrichment and saturated relative humidity are not necessary and results are in good agreement with the Standard methods MPN Test. M-Endo HiVeg Broth serves the same purpose.
Yeast extract and HiVeg peptone provide essential nutrients to the coliforms. Lactose is the fermentable carbohydrate present in the medium. Basic fuchsin and sodium sulphite inhibit gram-positive bacteria.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV1107 HiVeg peptone	**M1107** Peptic digest of animal tissue

Recommended for	:	Estimation of coliforms in water samples using membrane filter technique.
Reconstitution	:	61.5 g/l
Quantity on preparation (500g)	:	8.13 L
(100g)	:	1.62 L
pH (25°C)	:	7.5 ± 0.2
Supplement	:	None
Sterilization	:	121°C / 5 minutes.

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

Quality Control :

Appearance of powder
Purple coloured, homogeneous, free flowing powder.
Colour and Clarity
Pinkish orange coloured solution without any precipitate.
Reaction
Reaction of 6.15% w/v aqueous solution is pH 7.5 ± 0.2 at 25°C.
Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony*
Escherichia coli (25922)	10 - 100	good-luxuriant	pink with metallic sheen
Salmonella serotype Typhimurium (14028)	10 - 100	good-luxuriant	colourless-light pink
Staphylococcus aureus (25923)	10 - 100	inhibited	-

Key : * = on membrane filter

References :

1. Olson, Brown and Mickle, J. 1960, Milk and Food Tech., 23:86.
2. Shipe and Fields, 1955, Public Health Lab., 13:44.
3. Slanetz and Bartley, 1955, Applied Microbiol., 3:46.