Azide Dextrose HiVeg™ Broth MV345

Azide Dextrose HiVeg Broth is used as a selective medium for detection and enumeration of *Streptococci* in water, sewage, food and other material suspected of sewage contamination.

Composition ** :

Ingredients	Grams/Litre
HiVeg special peptone	15.0
HiVeg extract	4.5
Dextrose	7.5
Sodium chloride	7.5
Sodium azide	0.2

Final pH (at 25°C) 7.2 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 34.7 grams in 1000 ml distilled water for preparing single strength broth or use 69.4 grams in 1000 ml distilled water for double strength broth. Heat if necessary to ensure complete solution. Dispense in test tubes and sterilize by autoclaving at 12 lbs pressure (118°C) for 15 minutes.
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 :

The medium contains HiVeg special peptone and HiVeg extract (of vegetable origin) in place of Peptone special and Beef extract (of bovine origin) respectively, which makes the medium free of BSE/TSE risks.
Azide Dextrose HiVeg Broth is the modification of Azide Dextrose Broth formulated by Rothe, Mullmann and Seligmann (1) for quantitative determination of *Enterococci* in water, sewage, foods and other materials suspected of contamination with sewage.
It can be used for enumeration of faecal *Streptococci* by MPN technique as it is similar to conventional Azide Dextrose Broth recommended by APHA (2). It is a highly nutritious medium due to the presence of nutrient rich HiVeg special peptone, HiVeg extract and dextrose. Sodium azide inhibits growth of gram-negative bacteria, allowing *Enterococci* to grow (1, 3, 4). *Enterococci* are more resistant to chlorine in water, hence are better indicators of sewage pollution than *Escherichia coli*. When large volumes of water samples are to be examined, double strength medium can be used. Turbidity in tubes indicate presence of *Enterococci*. It should be further confirmed by inoculation in EVA Broth (M426) or Bromo Cresol Purple Azide Broth (M1212). Alternately an equivalent HiVeg Media; EVA HiVeg Broth (MV426) or Bromo Cresol Purple Azide HiVeg Broth (MV1212) or Glucose Azide HiVeg Broth (MV982) can be used.

Quality Control :

Appearance of powder
Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Colour and Clarity
Amber coloured, clear solution without any precipitate.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV345 HiVeg special peptone HiVeg extract	**M345** Peptone special Beef extract

Recommended for	:	Detection and enumeration of *Streptococci* in water, sewage, food and other material suspected of sewage contamination.
Reconstitution	:	34.7 g/l
Quantity on preparation (500g)	:	14.40 L
pH (25°C)	:	7.2± 0.2
Supplement	:	None
Sterilization	:	118°C / 15 minutes.

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

Reaction
Reaction of 3.47% 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 18-24 hours.

Organisms (ATCC)	Growth
Enterococcus faecalis (29212)	luxuriant
Escherichia coli (25922)	inhibited

References :

1. Mullmann W.L. and Seligmann E.B., 1950, Am. J. Publ. Health, 40:286.
2. Eaton A.D., Clesceri L.S. and Greenberg A.E.,(Eds.),1995, Standard Methods for the Examination of Water and Wastewater, 19th ed, APHA, Washington DC.
3. Edwards S.J., 1933, J. Comp. Path. Therap., 46:2111.
4. Hartman G., 1937, Milchw. Forsch, 18:166.

MV345 Azide Dextrose HiVeg Broth
1. Control
2. *Enterococcus faecalis*
3. *Escherichia coli*

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