

Brilliant Green HiVeg™ Broth 2%

MV121

Brilliant Green HiVeg Broth 2% is recommended for the detection and confirmation of coliform bacteria in water, waste water, foods, milk and dairy products.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	25.0
Lactose	10.0
Synthetic detergent No. II	5.0
Brilliant green	0.0133

Final pH (at 25°C) 7.2 ± 0.2

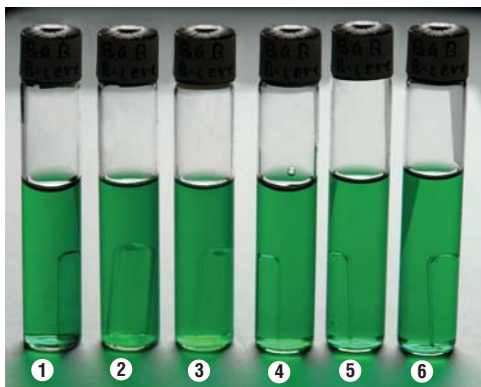
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 40 grams in 1000 ml distilled water. Heat if necessary to boiling to ensure complete solution. Mix well. Distribute in fermentation tubes containing inverted Durham's tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

Brilliant Green HiVeg Broth 2% is specially developed using HiVeg peptone to avoid BSE/TSE risks associated with animal origin peptone. This medium is the modification of Brilliant Green Bile Broth 2% which is used for presumptive identification and confirmation of coliform bacteria (1,2). Brilliant green and synthetic detergent No. II present in the medium inhibits gram-positive bacteria. Production of gas from lactose fermentation detected by incorporating inverted Durham's tube, indicates a positive evidence of faecal coliforms since nonfaecal coliforms growing in this medium do not produce gas. During examination of water samples, growth from presumptive positive tubes showing gas in Lactose HiVeg Broth (MV026) or Lauryl Tryptose HiVeg Broth (MV080) is inoculated in Brilliant Green HiVeg Broth



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1. Control
2. *Escherichia coli*
3. *Enterobacter aerogenes*
4. *Bacillus cereus*
5. *Enterococcus faecalis*
6. *Staphylococcus aureus*

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV121 HiVeg peptone Synthetic detergent No. II	M121 Peptic digest of animal tissue Oxgall

Recommended for : Detection and confirmation of coliform bacteria in water, foods, milk and dairy products.

Reconstitution : 40.0 g/l

Quantity on preparation (500g): 12.5 L

(100g) : 2.5 L

pH (25°C) : 7.2 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

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

2% wherein gas formation within 48 ± 2 hours confirms the presumptive test .

Quality Control :

Appearance of powder

Greenish yellow coloured, homogeneous, free flowing powder.

Colour and Clarity

Emerald green coloured, clear solution without any precipitate.

Reaction

Reaction of 4.0% 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 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Gas
<i>Bacillus cereus</i> (10876)	10 ² -10 ³	inhibited	-
<i>Enterobacter aerogenes</i> (13048)	10 ² -10 ³	luxuriant	+
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	none-poor	-
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	+
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	inhibited	-

References :

1. McCrady and Langerin, 1932, J. Dairy Science, 15:321.
2. McCrady, 1937, Am. J. Publ. Health, 27:1243.