

# **Technical Information**

### **Bromo Cresol Purple Azide MiVeg Broth**

### Product Code: VM2212

**Application:-** BCP Azide MiVeg Broth is recommended for the confirmation of the presence of faecal *Streptococci* in water and wastewater.

# Composition

Ingredients	Gms / Litre	
MiVeg hydrolysate	10.0	
Yeast extract	10.0	
D-Glucose	5.0	
Sodium chloride	5.0	
Dipotassium hydrogen phosphate	2.7	
Potassium dihydrogen phosphate	2.7	
Sodium azide	0.5	
Bromo cresol purple	0.032	
Final pH ( at 25°C)	7.0±0.2	

<sup>\*\*</sup> Formula adjusted, standardized to suit performance parameters.

### Principle & Interpretation

Bromocresol Purple Azide MiVeg Broth is prepared by using MiVeg hydrolysate instead of casein enzymic hydrolysate which makes the media BSE/TSE risks free which can be used for confirming the presence of Enterococci, particularly in bacteriological analysis of water according to Hajna and Perry (1). This medium can be used for testing after preliminary testing of water sample in the Azide Dextrose MiVeg Broth (VM1345) or equivalent Azide Dextrose Broth (DM1345), medium recommended for enumerating of feacal Streptococci by MPN technique as cited in APHA (2).

This medium has dextrose (D-glucose) as fermentable carbon source and bromocresol purple which act as an indicator. Fermentation of dextrose (D-glucose) due to growth and subsequent acid production changes the colour of the medium from purple to yellow. According to Hajna Enterococcal dextrose fermentation is improved by the addition of glycerol (1). It contains MiVeg hydrolysate and yeast extract which provide nitrogenous compounds, sulphur, amino acids and trace ingredients. Sodium chloride maintains osmotic equilibrium & Sodium azide inhibits the entire bacterial flora including those species which may have grown in the preliminary test media. Colour change to yellow with turbidity indicates and confirms growth of Enterococci.

## Methodology

Suspend 36 grams of powder media in 1000 ml distilled water. Add 5 ml/l glycerol if desired. Mix thoroughly. Dispense into test tubes and sterilize by autoclaving at 10 lbs pressure (115°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.

## **Quality Control**

#### Physical Appearance

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

### Colour and Clarity of prepared medium

Purple coloured, clear solution without any precipitate.

#### Reaction

Reaction of 3.6 % w/v aqueous solution pH: 7.0±0.2 at 25°C





#### pH range

6.8-7.2

### Cultural Response/Characteristics

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

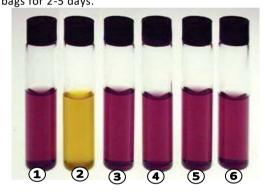
Organi	sms (ATCC)	Inoculum (CFU)	Growth	Acid
Entero	coccus faecalis (29212)	$10^2 - 10^3$	good-luxuriant	+
Escheri	chia coli (25922)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	-
Pseudo	monas aeruginosa (27853)	10 <sup>2</sup> -10 <sup>3</sup>	inhibited	-
Strepto	ococcus agalactiae (13813)	10 <sup>2</sup> -10 <sup>3</sup>	none-poor	-
Strepto	ococcus pyogenes (19615)	10 <sup>2</sup> -10 <sup>3</sup>	none-poor	-

Key: + = positive reaction, yellow colour

- = negative reaction, no colour change

## Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and use before expiry date as mentioned on the label. **Prepared Media:** 2-8°0 in sealable plastic bags for 2-5 days.



### VM2212 Bromo Cresol Purple Azide MiVeg Broth

- 1. Control
- 2. Enterococcus faecalis
- 3. Pseudomonas aeruginosa
- 4. Escherichia coli
- 5. Streptococcus agalactiae
- 6. Streptococcus pyogenes

# Further Reading

- 1. Hajna, A. A. and Perry, C.A. 1943, Am. J. Publ. Health, 33: 550.
- 2. Eaton, A.D., Clesceri, L.S and Greenberg, A.E. (eds.) 2005, Standard methods for the examination of water and wastewater, 21<sup>st</sup> edition, APHA, Washington, DC.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
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