

**Bromo Cresol Purple HiVeg™ Broth Base****MV676**

Bromo Cresol Purple HiVeg Broth Base is recommended for studying fermentation of carbohydrates by pure cultures.

**Composition \*\* :**

| Ingredients         | Grams/Litre |
|---------------------|-------------|
| HiVeg peptone       | 10.0        |
| Sodium chloride     | 5.0         |
| HiVeg extract       | 3.0         |
| Bromo cresol purple | 0.04        |

Final pH (at 25°C) 7.0 ± 0.2

\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

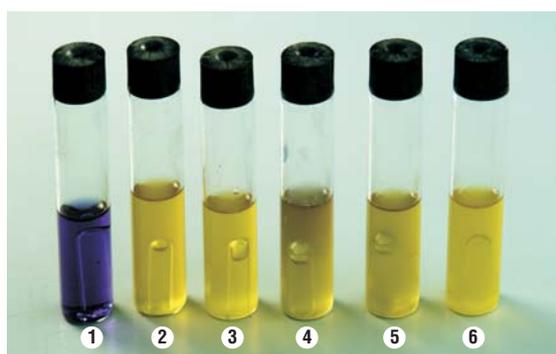
Suspend 18 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense in tubes containing inverted Durham's tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes. Cool and aseptically add sterile desired carbohydrate to a final concentration of 0.5 - 1.0%

**Principle and Interpretation :**

This medium is prepared by replacing Peptic digest of animal tissue with HiVeg peptone and Beef extract with HiVeg extract which are free from BSE/TSE risks. Bromo Cresol Purple HiVeg Broth Base is modification of the medium as recommended by APHA for studying fermentation reactions of members of *Enterobacteriaceae* (1). HiVeg peptone, HiVeg extract provide essential growth nutrients for bacterial metabolism. Bromo cresol purple acts as pH indicator which turns yellow in acidic condition. Sodium chloride maintains osmotic equilibrium.

**Quality Control :****Appearance of powder**

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



**MV676 Bromo Cresol Purple HiVeg Broth Base (with added dextrose)**

1. Control
2. *Escherichia coli*
3. *Enterobacter aerogenes*
4. *Klebsiella pneumoniae*
5. *Salmonella* serotype Typhimurium
6. *Shigella flexneri*

**Product Profile :**

| Vegetable based (Code MV)Ⓞ                     | Animal based (Code M)   |
|--|---|
| <b>MV676</b><br>HiVeg peptone<br>HiVeg extract | <b>M676</b><br>Peptic digest of animal tissue<br>Beef extract |

**Recommended for** : Studying fermentation of carbohydrates.

**Reconstitution** : 18.0 g/l

**Quantity on preparation (500g)** : 27.77 L

**pH (25°C)** : 7.0 ± 0.2

**Supplement** : Desired carbohydrate

**Sterilization** : 121°C / 10 minutes.

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

**Colour and Clarity**

Purple coloured, clear solution without any precipitate.

**Reaction**

Reaction of 1.8% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

**Cultural Response**

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours with addition of dextrose.

| Organisms (ATCC)                               | Growth    | Acid* | Gas* |
|--|-----------|-------|------|
| <i>Enterobacter aerogenes</i> (13048)          | luxuriant | +     | +    |
| <i>Escherichia coli</i> (25922)                | luxuriant | +     | +    |
| <i>Klebsiella pneumoniae</i> (13883)           | luxuriant | +     | +    |
| <i>Salmonella</i> serotype Typhimurium (14028) | luxuriant | +     | +    |
| <i>Shigella flexneri</i> (12022)               | luxuriant | +     | -    |

Key : \* = with added dextrose  
 Acid + = positive, yellow colouration  
 Acid - = negative, no change in colour  
 Gas + = positive, gas formation  
 Gas - = negative, no gas formation

**References :**

1. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For the Microbiological Examination of Foods, 4<sup>th</sup> ed., APHA, Washington, D.C.