

Glucose HiVeg™ Broth**MV860**

Glucose HiVeg Broth is used for study of glucose (dextrose) fermentation where a pH indicator is not desired.

Composition :**

| Ingredients | Grams/Litre |
|-------------------|-------------|
| HiVeg hydrolysate | 10.00 |
| Glucose | 5.00 |
| Sodium chloride | 5.00 |

Final pH (at 25°C) 7.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 20 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 12 lbs pressure (118°C) for 15 minutes.

Principle and Interpretation :

Glucose HiVeg Broth is prepared by completely replacing animal based, Casein enzymic hydrolysate with HiVeg hydrolysate and therefore the medium is totally free from BSE/TSE risks. This medium is the modification of Glucose Broth used by Waisbren, Carr and Dunnett for testing the sensitivity of microorganisms to antibiotics by the tube dilution method (1). It can also be used for the study of glucose fermentation when a medium without pH indicator is desired. Fermentation studies can be performed more accurately using pure 0.5% glucose as the source of carbohydrate. This medium contains glucose as the only fermentable carbohydrate and HiVeg hydrolysate which is free of carbohydrate. It provides nitrogenous source and necessary nutrients for the growth of the organisms under test. Sodium chloride helps to maintain the osmotic equilibrium.

Glucose HiVeg Broth therefore supports the growth of many fastidious as well as nonfastidious organisms. It gives rapid growth and hastens the early development of injured cells.

Quality Control :**Appearance of Powder**

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

Colour and Clarity

Light yellow coloured, clear solution without any precipitate.

Reaction

Reaction of 2.0% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

Product Profile :

| Vegetable based (Code MV)© | Animal based (Code M) |
|-----------------------------------|---|
| MV860 HiVeg hydrolysate | M860 Casein enzymic hydrolysate |

Recommended for : Study of glucose (dextrose) fermentation where a pH indicator is not desired.

Reconstitution : 20.0 g/l

Quantity on preparation (500g) : 25.0 L
(100g) : 5.0 L

pH (25°C) : 7.3 ± 0.2

Supplement : None

Sterilization : 118°C / 15 minutes.

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

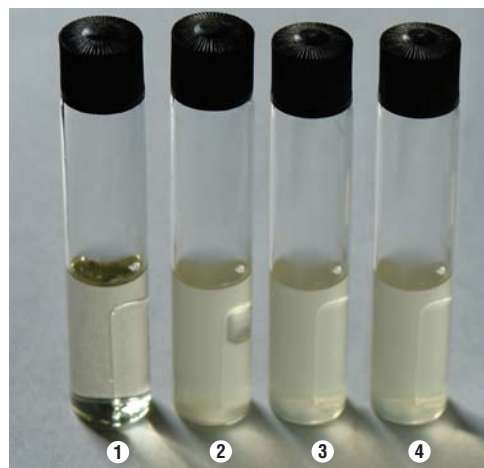
Cultural Response

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

| Organisms (ATCC) | Inoculum (CFU) | Growth | Gas |
|---|----------------------------------|-----------|-----|
| <i>Escherichia coli</i> (25922) | 10 ² -10 ³ | luxuriant | + |
| <i>Salmonella</i> serotype Typhi (6539) | 10 ² -10 ³ | luxuriant | - |
| <i>Shigella flexneri</i> (12022) | 10 ² -10 ³ | luxuriant | - |
| <i>Staphylococcus aureus</i> (25923) | 10 ² -10 ³ | luxuriant | - |
| <i>Staphylococcus epidermidis</i> (12228) | 10 ² -10 ³ | luxuriant | - |
| <i>Streptococcus pyogenes</i> (19615) | 10 ² -10 ³ | luxuriant | - |

References :

1. Waisbren, Carr and Dunnett, 1951, Am. J. Clin. Path., 21:884.

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1. Control
2. *Escherichia coli*
3. *Salmonella* serotype Typhi
4. *Staphylococcus aureus*