Technical Information

B.A.G.G. MiVeg Broth Base

Product Code :VM1220

Application:- B.A.G.G. MiVeg Broth Base (Buffered Azide Glucose Glycerol MiVeg Broth Base) is selective media, used for cultivation and detection of faecal *Streptococci* (group D) from clinical and sanitary samples.

Composition

Ingredients	ms / Litre
MiVeg hydrolysate No. 1	20.0
Dextrose	5.0
Dipotassium phosphate	4.0
Monopotassium phosphate	1.5
Sodium chloride	5.0
Sodium azide	0.5
Bromo cresol purple	0.015
Final pH (at 25°C)	6.9±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

B.A.G.G MiVeg Broth Base is prepared by using MiVeg hydrolysate No.1 instead of tryptose thereby making the media BSE/ TSE risk free. Hajna and Perry (1) developed SF Broth for the detection of faecal *Streptococci*, in water, milk and other materials. Subsequently Hajna (2) modified the medium by incorporating glycerol as additional growth factor to enhance dextrose fermentation by *Enterococccus faecalis*. This medium is the modification of this medium using vegetable peptones, which serves the same purpose. It contains MiVeg hydrolysate No. 1 serve as a source of carbon, nitrogen, vitamins and minerals. Phosphates & sodium chloride buffers the medium for pH changes and osmotic changes respectively. Mostly gram-negative bacteria are inhibited by sodium azide. Bromo cresol purple serve as a pH indicator and dextrose utilization produces acid reaction, which is indicated by colour change from purple to yellow. Incubate clinical specimens at 35°C for 18 - 48 hours and sanitary specimens at 45°C for 24 hours.

Methodology

Suspend 36 grams of powder media in 1000 ml distilled water containing 5 ml glycerol. Mix thoroughly. Dissolve the medium completely and dispense in test tubes in 10 ml amounts. Sterilize by autoclaving at 10 lbs pressure (115°C) for 15 minutes. The concentration of the medium must be adjusted to suit sample volume. Single strength medium should be used for smaller inocula such as clinical specimens, faeces and small sanitary specimens like water, but for larger inocula such as larger sanitary and waterspecimens double strength medium is necessary.
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

Light 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: 6.9±0.2 at 25°C

pH range

6.7-7.1

Cultural Response/Characteristics

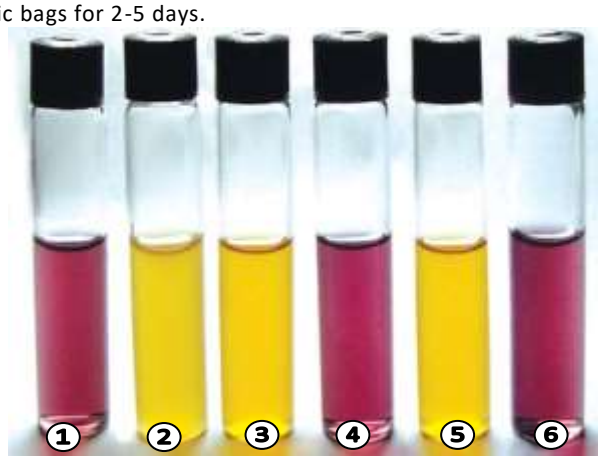
Cultural characteristics observed after an incubation at 45°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Acid
Enterococcus faecalis (29212)	10^2-10^3	luxuriant	>50%	+
Enterococcus faecium (27270)	10^2-10^3	good	>30%	+
Escherichia coli (25922)	10^3-2x10^3	inhibited	0%	-
Streptococcus bovis (27960)	10^3-2x10^3	luxuriant	>50%	+
Streptococcus pyogenes (19615)	10^3-2x10^3	inhibited	0%	-

Key: + = positive reaction, yellow colour throughout the medium
- = negative reaction, no change in colour, medium remains purple

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.



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1. Control
2. *Enterococcus faecalis*
3. *Enterococcus faecium*
4. *Escherichia coli*
5. *Streptococcus bovis*
6. *Streptococcus pyogenes*

Further Reading

1. Hajna A.A. and Perry C.A., 1943, Am. J. Public Health, 33:550.
2. Hajna A.A., 1951, Public Health Lab., 9:80.

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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