

Technical Information

Brilliant Green MiVeg Agar with Phosphates

Product Code : VM1971

Application:- Brilliant Green MiVeg Agar with Phosphates is recommended for selective isolation and identification of *Salmonellae* from mixed flora while inhibiting *Escherichia coli*, *Proteus* and *Pseudomonas* species.

Composition

Ingredients	Gms / Litre
MiVeg peptone	10.0
MiVeg extract	5.0
Yeast extract	3.0
Lactose	10.0
Sucrose	10.0
Disodium phosphate	1.0
Monosodium phosphate	0.60
Phenol red	0.09
Brilliant green	0.0047
Agar	12.0
Final pH (at 25°C)	6.9 ±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Brilliant Green MiVeg Agar with Phosphates is prepared by using Miveg peptones instead of animal based peptones which makes it BSE/TSE risk free. This media is the modification of the medium formulated as per the recommendation of Rijks Institute Voorde Volksgezondheid (National Institute for Public Health), Utrecht (1, 2). It is widely accepted because of its improved performance with respect to recovery of smaller numbers of *Salmonella* species, inhibition of *Escherichia coli*, *Proteus* species and *Pseudomonas* species (3).

It contains MiVeg peptone and MiVeg extract which supplies carbon, nitrogen, vitamins and minerals. Yeast extract provides B- complex vitamin. Lactose and sucrose serve as carbohydrate source. Phenol red play the role of pH indicator. Brilliant green inhibits gram-positive organisms and many gram- negative bacteria, except *Salmonella*. Sulphacetamide (1 g/l) and Sodium mandelate (0.25 g/l) can be added in this medium to inhibit contaminating microorganisms when the sample is suspected to be containing large number of competing organisms alongwith *Salmonella* species (4).

Methodology

Suspend 52 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat with occasional agitation and bring just to the boil to dissolve the medium completely. DO NOT AUTOCLAVE. For maximum recovery, aseptically Sulpha Supplement (MS2068) may be added. Cool to 50°C. Mix well and pour into sterile petriplates.

Quality Control

Physical Appearance

Pink coloured, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.2% Agar gel

Colour and Clarity of prepared medium

Greenish brown coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 5.2 % w/v aqueous solution pH: 6.9 ±0.2 at 25°C

pH range

6.7-7.1

Cultural Response/Characteristics

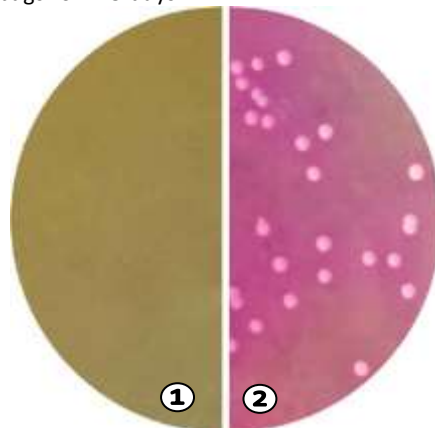
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Escherichia coli</i> (25922)	10 ² -10 ³	inhibited	>50%	-
<i>Proteus vulgaris</i> (13315)	10 ² -10 ³	none-poor	>50%	red
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	none-poor	>50%	red
<i>Salmonella</i> serotype Enteritidis (13076)	10 ² -10 ³	luxuriant	>50%	Bright red
<i>Salmonella</i> serotype Typhimurium (14028)	10 ² -10 ³	luxuriant	>50%	Bright red

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° in sealable plastic bags for 2-5 days.



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1. Control
2. *Salmonella* serotype Typhimurium

Further Reading

1. Edel W. and Kampelmacher E.H., 1969, Bull. W.H.O., 41:297.
2. Edel W. and Kampelmacher E.H., 1969, Bull. W.H.O., 39:487.
3. Read R. B. and Reyes A.L., 1968, Appl. Microbiol., 16:746.
4. Watson U.C. and Walker A.P., 1978, J. Appl. Bact., 45:195.



Dehydrated Culture Media
Bases / Media Supplements

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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