

TMV 048 – BRILLIANT GREEN BILE AGAR (BRILLIANT GREEN LACTOSE BILE AGAR) (VEG.)

INTENDED USE

For enumeration of coliform bacteria in water and foods.

PRODUCT SUMMARY AND EXPLANATION

Brilliant Green Veg Agar is prepared by replacing peptic digest of animal tissue and oxgall by Veg peptone and synthetic detergent No. II respectively which makes the medium free of BSE/TSE risks. Brilliant Green Veg Agar is the modification of Brilliant Green Bile Agar originally formulated as solid medium by Nobel and Tonney for the direct plating of materials of sanitary importance for enumeration of coliform bacteria. This medium is useful in selectively isolating *Salmonella* species from other coliform bacteria.

Colonies of coliform bacteria are deep red surrounded by a pink halo against blue background of the medium, while *Salmonella* species, which do not ferment lactose, produce colourless to light pink colonies. It is recommended that the medium be prepared just prior to use and when necessary to store the medium, it should be kept in dark. Medium is sensitive to light, particularly direct sunlight, which will exhibit a decrease in the productivity of the medium and also colour may change from deep blue to purple or red.

COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	8.250
Lactose	1.900
Sodium sulphite	0.205
Ferric chloride	0.0295
Monopotassium phosphate	0.0153
Erioglaucine	0.0649
Basic fuchsin	0.0776
Bile	0.00295
Brilliant green	0.0000295
Agar	10.150

PRINCIPLE

It contains brilliant green and synthetic detergent No. II combination which is highly selective for coliforms, inhibiting most of gram-positive and some gram-negative bacteria. Erioglaucine and basic fuchsin together indicate pH of the medium. When pH is neutral, colour of the medium is blue while acid production from lactose turns the medium pink and colonies appear pink to deep red depending on the pH change. Monopotassium phosphate is a buffering agent.

INSTRUCTION FOR USE

- Dissolve 20.7 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.
- For plating 10 ml quantities of water samples, prepare the medium in double strength.

Caution: Basic Fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light purple coloured, homogeneous, free flowing powder.
Appearance of prepared medium : Bluish purple coloured, slightly opalescent gel forms in petri plates.
pH (at 25°C) : 6.9±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	≥50%	Deep red (may have bile precipitate)	35-37°C	18-24 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Good-luxuriant	≥50%	Pink	35-37°C	18-24 Hours
<i>Salmonella Enteritidis</i>	13076	50-100	Good-luxuriant	≥50%	Colouress to light pink	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	≥10 ³	Inhibited	0%	-	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Noble and Tonney, 1935, J. Am. Waterworks Assoc., 27:108.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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