

CM 20302 – BRILLIANT GREEN BILE AGAR (BRILLIANT GREEN LACTOSE BILE AGAR)

INTENDED USE

For enumeration of coliform bacteria in water and foods.

PRODUCT SUMMARY AND EXPLANATION

Brilliant Green Bile Agar was originally formulated by Nobel and Ponney for enumeration of coliform bacteria from materials of sanitary importance. Subsequently APHA approved the medium for the estimation of coliforms in test samples of various materials

It is recommended that the medium be prepared just prior to use and if the medium has to be stored, it should be kept in dark. Brilliant Green Bile Agar medium is sensitive to light, particularly direct sunlight. Direct exposure may exhibit a decrease in the productivity of the medium and also the colour of the medium may change from deep blue to purple or red.

COMPOSITION

Ingredients	Gms / Ltr
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

The medium contains a combination of brilliant green and bile, which is highly selective for coliforms, inhibiting most of the gram-positive bacteria including lactose fermenting Clostridia and some gram-negative bacteria. Erioglaucine and basic fuchsin together form the indicator system of the medium. When the 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. Colonies of coliform bacteria are deep red surrounded by a pink halo against blue background of the medium.

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.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Pinkish purple to light purple 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
Escherichia coli	25922	50-100	Good-luxuriant	>=50%	Deep red (may have bile precipitate)	35-37°C	18-24 Hours
Klebsiella aerogenes	13048	50-100	Good-luxuriant	>=50%	Pink	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Good-luxuriant	>=50%	Colourless to light pink	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	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. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. McCrady and Langerin, 1932, J. Dairy Science, 15:321
5. Noble and Tonney, 1935, J. Am. Waterworks Assoc., 27:108.
6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. 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 LabUse Only

