ARENA BioScien

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BRILLIANT GREEN BILE BROTH

Brilliant Green Bile Broth is a liquid medium recommended for use in qualitative procedures for the detection of coliform organisms in water, wastewater, foods, and dairy products.

REF: BS.1/BGB01.100.0100	100 Gram	REF: BS.1/BGB01.250.0250	250 Gram
REF: BS.1/BGB01.500.0500	500 Gram		

CLINICAL SIGNIFICANCE

Researchers found that the combination of bile (oxgall) and brilliant green inhibit growth of organisms other than coliforms. Brilliant Green Bile Broth (BGBB) meets the specifications of the Association of Analytical Chemists (AOAC), the International Dairy Federation (IDF), and the American Public Health Association (APHA) for use in the confirmation of presumptive tests for coliforms. This medium is also recommended by the Environmental Protection Agency (EPA).

METHOD PRINCIPLE

Gelatin peptone provides nutrients necessary for growth. Lactose provides a source of energy. Brilliant green dye and ox gall inhibit both gram-positive and selected gram-negative organisms. Coliforms are resistant to these inhibitors and are able to replicate and ferment in this medium. Fermentation is detected by gas production in the Durham tube.

MEDIA COMPOSITION

Item	Formula per liter of medium
- Ox gall	20.00 gm
- Gelatin Peptone	10.00 gm
- Lactose	10.00 gm
- Brilliant Green	13.30 gm

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.
  S56: dispose of this material and its container at hazardous or special waste collection point.
  S57: use appropriate container to avoid environmental contamination.
  S61: avoid release in environment.

For further information, refer to the BRILLIANT GREEN BILE BROTH material safety datasheet.

EQUIPMENT REQUIRED NOT PROVIDED

- Screw capped Tubes
- Sterile Test tubes
- Incubator
- Autoclave

STORAGE AND STABILITY

BioScien BRILLIANT GREEN BILE BROTH should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature andsources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

PREPARATION

1. Suspend 40 g of medium in 1000 ml of demineralized water.
2. Warm slightly to dissolve completely.
3. Dispense required amount into test tubes.
4. Place an inverted fermentation vial in each tube.
5. Sterilize at 121°C for 15 minutes or following established laboratory procedures.

Deterioration

The color of ***BioScien*** BRILLIANT GREEN BILE BROTH is Cream to pale green homogeneous free flowing powder. Prepared medium is Emerald green coloured, clear solution without any precipitate. If there areany physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

SPECIMEN

Food and dairy samples; water samples

PERFORMANCE CHARACTERISTICS

Oranism	Growth	Gas
Bacillus cereus ATCC 10876	Inhibited	-
Escherichia coli ATCC 25922	luxuriant	Positive
Klebsiella aerogenes ATCC 13048	luxuriant	Positive
Enterococcus faecalis ATCC 29212	None-poor	Negative
Staphylococcus aureus ATCC 25923	Inhibited	-

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact ***BioScien*** technical support.

REFERENCES

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3. Richardson G., (Ed.), 1985, Standard Methods for the Examination of Dairy Products, 15th Ed, APHA, Washington, D.C.
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SYMBOLS IN PRODUCT LABELLING			
IVD	For in-vitro diagnostic use	Σ	Number of <n> test in the pack
LOT	Batch Code/Lot number		Caution
REF	Catalogue Number		Do not use if package is damaged
	Temperature Limitation		Consult Instruction for use
	Expiration Date		
	Manufactured by		