

MM0127

**Brilliant Green Bile Broth
(BGBB 2%)**

Use and description:

This is a selective enrichment medium for isolation of coliforms and to detect these organisms by gas production because of lactose fermentation. It has a balanced composition of bile and Brilliant green, which inhibits most Gram positive and Gram negative organisms. The medium is recommended by APHA and AWWA for enumeration of *Escherichia coli* and other coliforms in water, milk and other foodstuffs by determining the coli titre..

Composition per liter:

Peptone.....10.0 g
Bile..... 20.0 g
Lactose.....10.0 g
Brilliant green.....13.0 mg

Final pH of the ready to use medium: 7.4 ± 0.2

Medium preparation:

Add 40 grams of dehydrated culture medium to 1 liter of distilled water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes. To detect gas production, add sterile Durham tubes into the broth before inoculating.

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.
Ready to use medium: emerald green and clear.

Microbiological response:

Organism	Result
<i>Escherichia coli</i> ATCC 25922	Growth, gas (+)
<i>Enterobacter aerogenes</i> ATCC 13048	Growth, gas (+)
<i>Enterococcus faecalis</i> ATCC 29212	Inhibited, gas (-)
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited, gas (-)

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.

For supplement details please turn appendix 2.