

# BGLB 2% (Brilliant Green Lactose Bile) Broth



Medium used for the isolation and cultivation of coliform microorganisms in food, water and dairy products.

\*Equally use with MFDS (MB-B1030K), QIA (MB-B1030Q), NIER (MB-B1030N) and Fluoro BGLB (BGLB-MUG) (MB-F1030).

## • CONTENTS (Liter)

Peptone	10.0 g
Lactose	10.0 g
Oxgall	20.0 g
Brilliant Green	0.0133 g
Final pH = 7.2 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 40.01 G of powder in 1 L of distilled or deionized water. If necessary, add 1 vial of MUG supplement (MB-M1820) (BGLB-MUG). Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes with durham tubes.

### MUG supplement

1vial contents (each vial is sufficient for 1 L of medium)

MUG 0.05 g

(4-Methylumbelliferyl-β-D-glucuronide)

## • INTERPRETATION

BGLB 2% (Brilliant Green Lactose Bile) Broth is a medium used for the the isolation and cultivation of coliform microorganisms in food, water and dairy products. Peptone provides the essential nutrients for growth of organisms. Lactose is the fermentable carbohydrate and lactose fermenting organisms produce gas. Oxgall and brilliant green inhibit Gram-positive bacteria. MUG (4-Methylumbelliferyl-β-D-glucuronide) is a fluorescent substrate for β-D-glucuronidase encoded by *Escherichia coli*. The enzyme releases a highly fluorescent compound called 4-methylumbelliferone which fluoresces blue when the growths are observed under a UV.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Incubate at 35 ± 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light green

### Prepared medium

Appearance: clear

Color: green

Incubation conditions: 35 ± 2°C / 18 - 48 hours

Microorganism	ATCC	Inoculate CFU	Growth	Gas
<i>Escherichia coli</i>	25922	50-100	good	+
<i>Enterobacter aerogenes</i>	13048	50-100	good	+
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	inhibited	-

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. APHA 1985 "Standard methods for the examination of water and wastewater", 16th edition.
2. ISO 4831 "Microbiology: general guidance for the enumeration of coliforms. Most Probable Number technique" . 1991-03-01
3. FDA (1995) Bacteriological analytical manual, 8th ed.1998. Published by AOAC International.
4. Refer to the MFDS, QIA and NIER.

## • PACKAGE

Cat. No : MB-B1030 BGLB 2% (Brilliant Green Lactose Bile) Broth	500 G
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## • MICROBIAL CULTURE IMAGES



None    *E.aerogenes*    *E.coli*    *S.aureus*  
 ATCC 13048    ATCC 25922    ATCC 25923  
 (inhibited)

Incubation conditions : 35±2°C 18-48h