

**BRILLIANT GREEN BILE BROTH 2%
(BRILLIANT GREEN LACTOSE BILE BROTH 2%)****TM 365**

For detection and confirmation of coliform bacteria in water and foods

Composition

Ingredients	g/L
Oxgall	20.00
Peptic digest animal tissue	10.00
Lactose	10.00
Brilliant green	0.0133

*Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 40g in 1000ml distilled water. Gently heat to boil with gentle swirling and dissolve the medium completely. Dispense 10ml medium/culture tube containing inverted Durham's tube. Sterilize by autoclaving at 15 psi (121 °C) for 15 minutes.

Appearance: Emerald green colour, clear solution without any precipitate

pH (at 25°C): 7.2 ± 0.2

Principle

BRILLIANT GREEN BILE BROTH 2% (BRILLIANT GREEN LACTOSE BILE BROTH 2%) is used for the detection of coliform organisms in foods, dairy products, water and wastewater, as well as in other materials of sanitary importance.

Brilliant Green Bile Broth 2% contains two inhibitors of both gram-positive and selected gram-negative organisms; i.e., Oxgall and Brilliant green dye.

Peptic digest of animal tissue provides the essential nutrients for growth: nitrogen, vitamins, minerals and amino acids. Organisms, primarily coliforms, which are resistant to the action of the inhibitors and which ferment Lactose are able to replicate in this medium.

Fermentation is detected by gas production. Gas production within 48 hours is considered positive evidence of fermentation by coliforms.

Microbiological parameters (Growth promotion test)

Cultural characteristics observed after inoculation (10^3 – 10^4 CFU / ml) and incubation at 35 - 37°C for 18 - 48 hours.



PRODUCT DATA SHEET

Test strains	ATCC	Inoculum (CFU/ml)	Growth	Gas production
<i>Escherichia coli</i>	25922	10 ³	Good - Luxuriant	+
<i>Enterobacter aerogenes</i>	13048	10 ³	Good - Luxuriant	+
<i>Enterococcus faecalis</i>	19433	10 ³	None - Poor	NA
<i>Staphylococcus aureus</i>	25923	10 ⁴	Inhibited	NA

NA; Not applicable

References

1. Wehr and Frank (ed.). Standard methods for the examination of dairy products, 17th ed. American Public Health Association, Washington, D.C. (2004).
2. U.S. Food and Drug Administration. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md. (2001).
3. Clesceri, Greenberg and Eaton (ed.). Standard methods for the examination of water and wastewater, 20th ed. American Public Health Association, Washington, D.C. (1998).
4. U.S. Food and Drug Administration. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md. (1995).