

Dehydrated Culture Media Instructions for Use

BRILLIANT GREEN BILE BROTH 2% (M124)

Dehydrated Culture Media

USE: Brilliant Green Bile Broth 2% (Brilliant Green Lactose Bile Broth) is used for the detection of coliform organisms in foods, dairy products, water and wastewater, as well in other materials of sanitary importance.

DESCRIPTION: Brilliant Green Bile Broth 2% is formulated according to the American Public Health Association (APHA)¹ specifications for use in the confirmation of presumptive tests for coliforms. Gelatin Peptone is the carbon and nitrogen source used for general growth requirements in Brilliant Green Bile Broth 2%. Oxbile and Brilliant Green inhibit Gram-positive bacteria and many Gram-negative bacteria, other than coliforms. Lactose is a carbohydrate source. Bacteria that ferment lactose and produce gas are detected.

FORMULA:

Gelatin Peptone	10.0 g/L
Oxgall	20.0 g/L
Lactose	10.0 g/L
Brilliant Green	13.3 mg/L
Total	40 g/L

Note: Medium may be adjusted and/or supplemented as required to meet performance criteria.

Final pH: 7.2 ± 0.2 at 25°C

PHYSICAL APPEARANCE:

Dehydrated Appearance – Beige to greenish-beige, free-flowing, homogeneous.

Prepared Appearance - Emerald green, clear.

PROCEDURE: Suspend 40 g of the powder in 1L of purified water. Mix thoroughly. Autoclave at 121°C for 15 minutes. Cool broth as quickly as possible.

EXPECTED RESULTS: Cultural response after 48 hours at 35°C. Gas production within 48±3 hours is considered positive evidence of fermentation by coliform bacilli.

Microorganism	CFU	Growth	Gas
K. aerogenes ATCC™ 13048	10 ² -10 ³	+	+
E. faecalis ATCC™ 29212	10 ³ -2x10 ³	Partial to complete inhibition	-
E. coli ATCC™ 25922	10 ² -10 ³	+	+
S. aureus ATCC™ 25923	10 ³ -2x10 ³	Marked to complete inhibition	-

STORAGE: Store the product at 2-30°C protected from moisture for up to the expiration date.

LIMITATIONS: For laboratory use only. The dehydrated medium should be discarded if there are any changes in the color or if it is no longer free flowing.

SIZES AVAILABLE: M1241 (40 g), M1242 (500 g), M1243 (2 kg), M1244 (10 kg)

PACKAGING: Additional configurations are available upon request.

REFERENCES:

- Clesceri, Greenberg and Eaton (ed.), 1998. Standard methods for the examination of water and wastewater, 20th ed. American Public Health Association, Washington, D.C.
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- U.S. Food and Drug Administration. 1995. BAM, 8th ed. AOAC International, Gaithersburg, MD.
- Horwitz (ed.). 2000. Official methods of analysis of AOAC International, 17th ed. Vol.1. AOAC International, Gaithersburg, MD.

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 Downes and Ito (ed.). 20001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.