

# **BRILLIANT GREEN BILE BROTH 2%**

## **INTENDED 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 as in other materials of sanitary importance.

#### SUMMARY AND EXPLANATION

Brilliant Green Bile Broth 2% is formulated according to the American Public Health Association (APHA)<sup>1</sup> specifications for use in the confirmation of presumptive tests for coliforms.

## **PRINCIPLE**

Brilliant Green Bile Broth 2% contains two inhibitors of both gram-positive and selected gram-negative organisms; i.e., oxgall and brilliant green dye. Organisms, primarily coliforms, which are resistant to the action of the inhibitors and which ferment the lactose, are able to replicate in this medium. Fermentation is detected by gas production.

## **REAGENTS (FORMULA)**

Peptone 10.0	g
Oxgall 20.0	g
Lactose	_
Brilliant Green 13.5	mg
Deionized Water 1000.0	mĺ

## **PROCEDURE**

For the detailed procedures for use of this medium in confirmatory testing for coliforms, refer to the various compendia for the examination of materials of sanitary importance. <sup>1-5</sup>

## **EXPECTED RESULTS**

Gas production within  $48 \pm 3$  hours is considered positive evidence of fermentation by coliform bacilli. Detailed results for the enumeration of coliforms using Brilliant Green Bile Broth 2% are discussed in the

various compendia of methods for microbiological examination of foods, dairy products and water and wastewater.<sup>1-5</sup>

## **QUALITY CONTROL**

All lot numbers have been tested and have been found to be acceptable. Customers can test products using the following quality control organisms. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

Organisms	Incubation	Results
Enterococcus faecalis ATCC 19433	$35 \pm 2$ °C for 48 hours	Partial to Complete Inhibition
Escherichia coli ATCC 25922	$35 \pm 2$ °C for 48 hours	Growth with Gas Production

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#### **BIBLIOGRAPHY**

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- 4. Horwitz (ed.). 2007. Official methods of analysis of AOAC International, 18th ed., online. AOAC International, Gaithersburg, Md.
- 5. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.

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