Brilliant Green Bile Agar

Intended Use
Brilliant Green Bile Agar is used for isolating, differentiating and enumerating coliform bacteria.

Summary
Noble and Tonney described Brilliant Green Bile Agar for determining the relative density of coliform bacteria in water and sewage samples. The medium is particularly useful in selectively isolating *Salmonella* spp. from other coliform bacteria.

Principle
Peptic digest of animal tissue acts as source of nitrogen, carbon, vitamins and other growth factors. Lactose is the fermentable carbohydrate. Basic fuchsin and erioglaucine are the pH indicators while monopotassium phosphate is the buffer. Gall powder and brilliant green combination is highly selective for coliforms, inhibiting most of the Gram-positive and Gram-negative bacteria. Coliform bacteria typically ferment lactose producing acid, and in the presence of basic fuchsin produce deep red colonies surrounded by a pink halo against blue background of the medium, while *Salmonella* which do not ferment lactose, produce colourless to faint pink colonies.

Formula*

Ingredients	**g/L**
Peptic Digest of Animal Tissue	8.25
Lactose	1.9
Sodium Sulphite	0.205
Ferric Chloride	0.0295
Basic Fuchsin	0.0776
Erioglaucine	0.0649
Monopotassium Phosphate	0.0153
Gall Powder#	0.00295
Brilliant Green	0.0000295
Agar	10.15
Final pH (at 25°C)	6.9 ± 0.2

*Adjusted to suit performance parameters.
#Equivalent to Oxgall

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Sewage and water samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding

Directions
1. Suspend 20.69 g of the powder in 1000 mL purified / distilled water and mix well.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. For plating 10 mL quantities of water samples, prepare the medium in double strength.

Quality Control

Dehydrated Appearance: Light purple coloured, homogeneous free flowing powder.
Prepared Appearance: Bluish purple coloured, slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics observed after incubation at 30°C-35°C for 18-24 hours.

Organisms (ATCC)	Growth	Colour of Colony
Salmonella serotype *Enteritidis* (13076)	Good	Light pink
Klebsiella aerogenes (13048)	Good	Pink
Escherichia coli (25922)	Good	Deep red with bile precipitate
Staphylococcus aureus subsp. *aureus* (6538)	Inhibited	-
Staphylococcus aureus subsp. *aureus* (25923)	Inhibited	-
Escherichia coli (8739)	Good	Deep red with bile precipitate

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions/Limitations

1. The medium is sensitive to light, particularly direct sunlight, which produces a decrease in the productivity of the medium and a change in colour from deep blue to purple or red.
2. The medium should be prepared just prior to use and, when necessary to store the medium, it should be kept in the dark.

Warranty

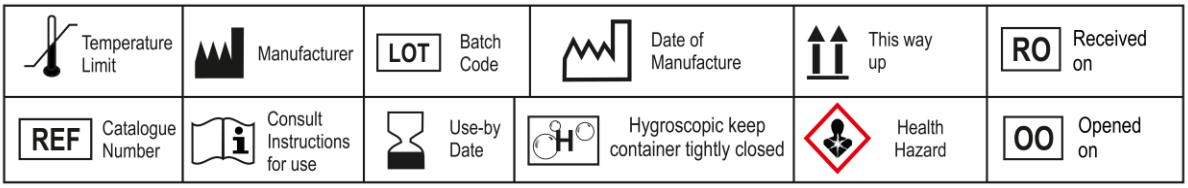
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Noble and Tonney, 1935, J. Am. Waterworks Association; 27:108.
2. Downes and Ito (ed.) 2001, Compedium Of Methods for The Microbiological Examination of Foods, 4th edition, APHA Washington DC.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201020310100	Dehydrated Culture Media	100 g
201020310500	Dehydrated Culture Media	500 g



Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.