

Brilliant Green Bile Agar

For the determination of the degree of contamination by coliforms in drinking water and waste water

Formula in grams per liter:

Brilliant Green	0,0295	Gelatin Peptone	8,25
Lactose	1,90	Basic Fuchsin	0,077
Erioglaucine	0,0649	Ferric Chloride	0,0295
Sodium Sulfite	0,025	Monopotassium Phosphate	0,0153
Oxbile	0,00295	Bacteriological Agar	10,15

Final pH: 6,9 ± 0,2 at 25 °C

Preparation:

Suspend 20,6 grams of the medium in one litre of distilled water. Soak for 5-10 minutes to hydrate correctly the agar. Heat with frequent agitation and boil for one minute. Sterilize in the autoclave at 121°C (15 lbs. sp.) for 15 minutes. Cool to 45-50°C and pour into Petri dishes.

Uses:

Brilliant Green Bile Agar can be used to assess the degree of contamination of water samples, of diverse foods as well as in other products. For the enumeration of coliform bacteria you should employ sample dilutions which yield between 10-50 colonies per plate using the pour plate method. Therefore, several dilutions should be made in the melted medium, poured and once they have jellified, incubated at 35-37°C for 17-19 hours.

The coliform colonies have an intensely red center zone surrounded by a pink halo sharply outlined against the uniformly blue background of the medium.

The medium is sensitive to light, which reduces its effectiveness and changes its color from strong blue to purple or pink. The medium should be prepared immediately before use and, if necessary, stored in the dark for as little time as possible.

Microbiological Tests:

Microorganisms	Growth	Colony color
<i>Escherichia coli</i> ATCC 25922	Good	Red
<i>Salmonella enteritidis</i> ATCC 13076	Good	Colorless
<i>Staphylococcus aureus</i> ATCC 25923	-	-
<i>Enterobacter aerogenes</i> ATCC 13048	Good	Pink



Billede mangler