

Brilliant Green Bile Agar

Catalog : HB0173-5-500

Brilliant Green Bile Agar is used for the isolation of *Salmonella* (except *Salmonella typhi* and *Shigella*).

Approximate Formula:

Ingredients	gm/liter
Pancreatic Digest of Casein	5.0
Peptic Digest of Animal Tissue	5.0
Yeast Extract	3.0
Sodium Chloride	5.0
Lactose	10.0
Sucrose	10.0
Brilliant Green	0.0125
Phenol Red	0.08
Agar	20.0
Final pH 6.9±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 58.0g of the medium in one liter of distilled water or deionized water. Mix well and heat with frequent agitation to completely dissolve the powder. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes. When cooling to about 45-50°C, pour into sterile petri dishes. Do not store more than one day.

Principle and Interpretation:

Pancreatic digest of casein and peptic digest of animal tissue are source of carbon, nitrogen, vitamins and minerals. Lactose is a fermentable carbohydrate. Brilliant green dye inhibits gram-positive bacteria and a majority of gram-negative bacilli. Phenol red serves as a pH indicator and yields a yellow color as a result of acid production in the fermentation of the lactose and/or sucrose in the medium. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing red powder. The prepared medium is a kind of red transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is caking or color variation cannot be used.

Storage conditions and Shelf life:

Brilliant Green Bile Agar must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36°C for 24 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Recovery	Remarks
<i>Escherichia coli</i>	ATCC 25922	>10 ³	Poor	/	Yellow colonies
<i>Staphylococcus Aureus</i>	ATCC 6538	>10 ³	Inhibited	/	/
<i>Salmonella typhimurium</i>	ATCC 14028	20-200	Luxuriant	≥70%	Pink colonies
<i>Salmonella enteritidis</i>	CMCC 50760	20-200	Luxuriant	≥70%	Pink colonies

References:

- Kristensen, Lester and Jurgens. 1925. Br. J. Exp. Pathol. 6:291.
- Kauffmann. 1935. Z. Hyg. Infektionskr. 117:26.
- Eaton, Rice and Baird (ed.). 2005. Standard methods for the examination of water and wastewater, 21st ed., online. American Public Health Association, Washington, D.C