

# PRODUCT INFORMATION

Your Smarter Culture Media Choice



## Bismuth Sulfite Agar Cat. No. B02-108

Date of issue  
3/20/14

### DESCRIPTION

Bismuth Sulfite Agar is used for the isolation of *Salmonella spp.* A modification by Wilson and Blair, Bismuth Sulfite Agar uses Bismuth and Sodium Sulfite for the selective isolation and of typhoid and non-typhoid *Salmonella*. This medium is used particularly for the isolation of *Salmonella typhi* from clinical and environmental specimens including food, feces, urine, and sewage. Bismuth and brilliant green dye act as inhibitors to most enteric bacteria and Gram-positive bacteria but allow *Salmonella typhi* to produce black colonies surrounded by a metallic sheen.

#### Formula\* per Liter:

Casein Digest Peptone.....	5.0g
Peptic Digest of Animal Tissue .....	5.0g
Disodium Phosphate.....	4.0g
Bismuth Sulfite.....	8.0g
Beef Extract.....	5.0g
Ferrous Sulfate .....	0.3g
Brilliant Green.....	0.025g
Dextrose .....	5.0g
Agar.....	20.0g

**Final pH:** 7.5 ± 0.2 at 25°C

\* Grams per liter may be adjusted or formula supplemented to obtain desired performance.

### PREPARATION

Mix 52 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. DO NOT AUTOCLAVE. Cool to 45-50°C. Pour into sterile Petri dishes while gently shaking flask to disperse precipitate.

### QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, free flowing, and beige to greenish-beige.
2. Visually the prepared medium is green-yellow and opaque.
3. Expected cultural response after 40-48 hours at 35°C.

#### Organism:

*Escherichia coli* ATCC® 25922  
*Enterococcus faecalis* ATCC® 29212  
*Salmonella typhi* ATCC® 19430  
*Salmonella typhimurium* ATCC® 14028

Growth:	Colony Color:
Partial Inhibition	Brown to Green
Inhibition	-
Growth	Black with metallic sheen
Good	Black with metallic sheen

### STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing, or if the color has changed from the original beige or greenish-beige color.