

# BG Sulfa Agar

Selective medium used for the isolation of *Salmonella* spp. from clinical samples and foodstuffs.

\*Equally use with MFDS (MB-B0863K) and QIA (MB-B0863Q).

## • CONTENTS (Liter)

|                               |          |
|-------------------------------|----------|
| Yeast Extract                 | 3.0 g    |
| Proteose Peptone No.3         | 10.0 g   |
| Lactose                       | 10.0 g   |
| Saccharose                    | 10.0 g   |
| Sodium Sulfapyridine          | 1.0 g    |
| Sodium Chloride               | 5.0 g    |
| Agar                          | 20.0 g   |
| Brilliant Green               | 0.0125 g |
| Phenol Red                    | 0.08 g   |
| Final pH = 6.9 ± 0.2 at 25°C. |          |

## • PROCEDURE

Suspend 59.09 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. DO NOT OVERHAET. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

## • INTERPRETATION

BG Sulfa Agar is a selective medium used for the isolation of *Salmonella* spp. from dairy products, or other foods contaminated with *Salmonella*. Yeast extract and proteose peptone No.3 provide nitrogen, vitamins and minerals. Sodium sulfapyridine increases selectivity. Phenol red is the pH indicator. Sodium chloride maintains the osmotic balance.

## • TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate plates at 36 ± 1°C for 20 - 24 hours. Refer the appropriated reference for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: pink.

### Prepared medium

Appearance: slightly opalescent.

Color: orange-brown.

Incubation conditions: 36 ± 1°C / 20 - 24 hours.

| Microorganism                 | ATCC  | Inoculum CFU     | Growth              | Characteristics       |
|-------------------------------|-------|------------------|---------------------|-----------------------|
| <i>Salmonella enteritidis</i> | 13076 | 50-100           | good                | pink-white colonies   |
| <i>Salmonella typhimurium</i> | 14028 | 50-100           | good                | pink-white colonies   |
| <i>Escherichia coli</i>       | 25922 | ≥10 <sup>3</sup> | partially inhibited | yellow-green colonies |
| <i>Proteus vulgaris</i>       | 13315 | ≥10 <sup>3</sup> | partially inhibited | -                     |

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

## • REFERENCES

1. Osborne and Stokes, Appl. Microbiol., v. 3, 295 (1955).
2. D'Aoust. 1984. J.food Prot.
3. Gray, (1995). Manual of Clinical microbiology, 6th ed. American Society for microbiology, p.450-456.
4. United States Pharmacopeia Convention. 1995. The United States Pharmacopeia, 23rd ed.
5. Refer to the MFDS and QIA.

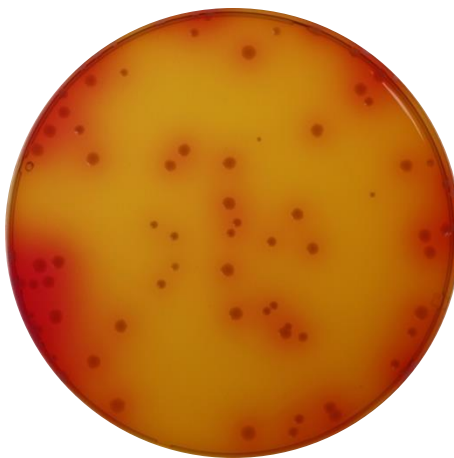
## • PACKAGE

|                                     |       |
|-------------------------------------|-------|
| Cat. No : MB-B0863<br>BG Sulfa Agar | 500 G |
|-------------------------------------|-------|

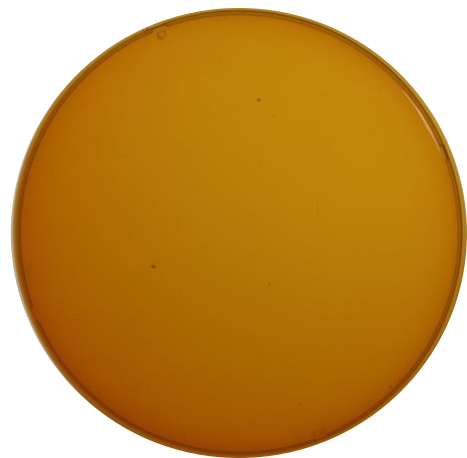
## • MICROBIAL CULTURE IMAGES



None



*Salmonella enteritidis* ATCC 13079



*Escherichia coli* ATCC 25922

Incubation conditions : 35±1 °C 20-24h