

MM0182 **Brilliant Green Agar (Modified)** **(BGA)**

Use and description:

Selective medium for the isolation of salmonellae. The modification was to increase the selectivity of the medium by increasing the brilliant green concentration. To increase selectivity further it is recommended to include 1 g/l of sodium sulfacetamide and 250 mg/l of sodium mandellate. *Salmonella* colonies are red, pinkish or white but they are always surrounded by a red halo, which shows the inactivity of lactose or sucrose. The growth of lactose and/or sucrose fermenting bacteria are partially inhibited but in the case of growth they produce yellow-green colonies surrounded by a yellow halo. *Proteus* and *Pseudomonas* are inhibited, they produce small, red colonies.

Composition per liter:

| | |
|-------------------------|---------|
| Peptone..... | 10.0 g |
| Meat extract..... | 5.0 g |
| Yeast extract..... | 3.0 g |
| Lactose..... | 10.0 g |
| Sucrose..... | 10.0 g |
| Disodium phosphate..... | 1.0 g |
| Sodium phosphate..... | 0.6 g |
| Phenol red..... | 90.0 mg |
| Brilliant green..... | 5.0 mg |
| Agar..... | 12.0 g |

Final pH of the ready to use medium: 6.9 · 0.2

Medium preparation:

Add 54.0 grams of dehydrated culture medium to 1 liter of distilled water. Heat gently with occasional agitation and bring just to the boil to dissolve the medium completely. DO NOT AUTOCLAVE THIS MEDIUM.

Quality specifications:

Dehydrated medium: homogeneous, pinkish fine powder.

Ready to use medium: orange-brown agar, very slightly opalescent.

Microbiological response:

| Organism | Result |
|--|---------------------|
| <i>Salmonella typhimurium</i> ATCC 14028 | Good growth |
| <i>Escherichia coli</i> ATCC 25922 | Negative, inhibited |