

## BRILLIANT GREEN/ SS AGAR

Selective media for *Salmonella* spp. isolation.

### BRILLIANT GREEN TYPICAL FORMULA (g/L)

Peptone	10.0
Lactose	10.0
Yeast Extract	3.0
Saccharose	10.0
Sodium Chloride	5.0
Phenol Red	0.08
Brilliant Green	0.0125
Agar	20.0

Final pH 6.9 ± 0.2

### SS TYPICAL FORMULA (g/ L)

Peptone	13.0
Yeast Extract	4.0
Lactose	12.0
Sodium Thiosulphate	5.0
Sodium Chloride	5.0
Bile Salts N. 3	1.5
Ferric Ammonium Citrate	1.5
Brilliant Green	0.33 mg
Neutral Red	0.025
Agar	15.0
Final pH 7.0 ± 0.2	

### DESCRIPTION

**BRILLIANT GREEN AGAR** is a selective medium for *Salmonella* spp. isolation, other than *S. typhi*, from foods and faecal samples, recommended by European Pharmacopoeia.

**SS AGAR** is a highly selective medium for the isolation of *Salmonella* and some *Shigella* species from clinical specimens, foodstuffs and other samples.

### PRINCIPLE

Peptone yields the medium highly nutritive providing organic nitrogen, amino acids and peptides with long chain, while yeast extract is a source of aminoacids and vitamins of group B. Lactose is a substrate for fermentation and allows the differentiation of *Salmonella* spp. and other lactose non-fermenters. Sodium chloride maintains the osmotic balance of the medium. Phenol Red constitutes the pH indicators of the medium. Brilliant Green has a selective activity against gram-positive bacteria.

In **BRILLIANT GREEN AGAR** saccharose is another source of energy.

In **SS AGAR** bile salts have a selective activity against gram-positive bacteria, while sodium thiosulphate in combination with iron acts as an indicator for sulphide production, which is indicated by blackening in the centres of the colonies.

Agar is the solidifying agent.

### TECHNIQUE

Inoculate plates streaking the sample to test on the agar surface using a sterile loop. Incubate at 36±1°C for 24-48 .

### INTERPRETATION OF RESULTS

On **BRILLIANT GREEN AGAR** *Salmonella* spp. (other than *Salmonella typhi* and *Salmonella paratyphi*) cultivate with white to red colonies, surrounded by a red halo. *Salmonella typhi* and *Salmonella paratyphi* are completely or partially inhibited. *Escherichia coli*, *Klebsiella* spp. and *Enterobacter* spp. have a poor growth forming yellow-green colonies, surrounded by a halo of the same color. *Proteus* spp. can be inhibited or cultivate with red colonies. *Shigella* spp. are completely inhibited by the presence of Brilliant Green.

On **SS AGAR** *Salmonella* and other lactose non-fermenters produce opaque, translucent or transparent colonies with or without a black centre. *Shigella* colonies are colourless. The few lactose fermenting organisms that develop on the medium are readily differentiated by their reddish, mucoid colonies.

### STORAGE

10-30°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

### WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

### DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

### REFERENCES

1. Kristensen M., Lester V. and Jurgens A. ,1925, Brit. J. Exp. Pathol., 6:291.
2. Isenberg, H.D., Kominos, S., Siegel, M. 1969. Isolation of Salmonellae and Shigellae from an artificial mixture of fecal bacteria. Appl. Microbiol., 18(4):656
3. NF EN 12824. February 1998 .Microbiology of food and animal feeding stuffs. Horizontal method for the detection of Salmonella.
4. European Pharmacopoeia, 3<sup>rd</sup> ed. (2001).



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## PRODUCT SPECIFICATIONS

**NAME**  
**BRILLIANT GREEN/ SS AGAR**

**PRESENTATION**  
Ready plates (90 mm) with two sectors.

**STORAGE**  
10-30 °C

PACKAGE		
Code	Content	Packaging
18012	20 plates	1. 5 plates in thermically soldered film 2. 4 x 5 plates in cardboard box
18012*	100 plates	1. 5 plates in thermically soldered film 2. 2 x 5 plates in plastic bag 3. 10 piles (2x5 plates) in cardboard box

**USE**  
**BRILLIANT GREEN AGAR** is a selective medium for *Salmonella* spp. isolation, other than *S. typhi*, from foods and faecal samples, recommended by European Pharmacopoeia.  
**SS AGAR** is a highly selective medium for the isolation of *Salmonella* and some *Shigella* species from clinical specimens, foodstuffs and other samples.

**TECHNIQUE**  
Refer to technical sheet of the product.

**APPEARANCE OF THE MEDIUM**  
**BRILLIANT GREEN AGAR** is a orange-brown medium.  
**SS AGAR** is a red-orange medium, very slightly opalescent.

**SHELF LIFE**  
6 months








**QUALITY CONTROL**

- Control of general characteristics, label and print
- Sterility control  
7 days at  $25 \pm 1^\circ\text{C}$ , in aerobiosis  
7 days at  $36 \pm 1^\circ\text{C}$ , in aerobiosis
- Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Inoculum for selectivity:  $10^4$ - $10^5$  UFC/ml  
Inoculum for specificity:  $\leq 10^4$  UFC/ml

Incubation conditions:  $36 \pm 1^\circ\text{C}$  for 18-24 hours

Microorganisms		Growth on BRILLIANT GREEN AGAR	Growth on SS AGAR
<i>Shigella flexneri</i>	ATCC 12022	Inhibited	Good/ Colorless colonies
<i>Salmonella typhimurium</i>	ATCC 14028	Good/ White-red colonies/ Red halo	Good/ Colorless colonies w or w/o black center
<i>Salmonella enteritidis</i>	ATCC 13076	Good/ White-red colonies/ Red halo	Good/ Colorless colonies w or w/o black center
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited/ Yellow-green colonies	Partially inhibited/ Pink to red colonies
<i>Staphylococcus aureus</i>	ATCC 25923	Inhibited	Inhibited

### TABLE OF SYMBOLS

<b>IVD</b> In Vitro Diagnostic Medical Device	 Do not reuse	 Manufacturer	 Contains sufficient for <n> tests	 Temperature limitation
<b>REF</b> Catalogue number	 Fragile, handle with care	 Use by	 Caution, consult accompanying documents	<b>LOT</b> Batch code



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