BRILLIANT GREEN AGAR

BGAG-00I-500

- **Principle**

Brilliant Green Agar is composed of proteose peptone, yeast extract, lactose, sucrose, sodium chloride, brilliant green, phenol red, and agar. Proteose peptone provides nitrogen and other essential nutrients required for bacterial growth. Yeast extract supplies additional nitrogen, vitamins and other growth factors. Lactose and sucrose serve as carbohydrate sources.

Sodium chloride helps to maintain osmotic balance. Brilliant green acts as a selective agent, inhibiting most Gram-positive and many Gram-negative bacteria, while allowing the growth of *Salmonella* spp. Phenol red is included as a pH indicator. Agar serves as the solidifying agent.

- **Regulatory compliance**

This product is manufactured under a quality management system in accordance with ISO 9001 and ISO 13485, and its formulation and quality control comply with applicable international standards, such as ISO 11133, where relevant.

- **Composition**

Ingredients	**g/L**
Proteose Peptone	10.00
Yeast Extract	3.00
Lactose	10.00
Saccharose	10.00
Sodium Chloride	5.00
Brilliant Green	0.012
Phenol Red	0.08
Agar	20.00

- **Preparation**

Dissolve 58.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 min, (avoid overheating) cool it to 42-45 °C and distribute aseptically in petri plates. Ensure complete solidification and inoculate test sample aseptically.

- **Applications and use**

Recommended for isolating Salmonella other than *Salmonella typhimurium*. Pharmaceutical samples, clinical and non-clinical samples etc.

- **Quality control**

Solubility	w/o rests
Appearance	Fine powder

Colour of the dehydrated medium	Pinkish beige
Colour of the prepared medium	Light orange-brown
Final pH (25 °C)	6.9 ± 0.2

- **Microbiological test**

Microorganism	ATCC	Growth	Recovery	Colony colour
Salmonella typhimurium	14028	Good	≥ 60%	Pink-white with red surrounding
Salmonella Abony	NCTC-6017	Good	≥ 60%	Pink-white with red surrounding
Salmonella enteritidis	13076	Good	≥ 60%	Pink-white with red surrounding
Escherichia coli	8739	None to poor	0-10%	Yellow-green
Escherichia coli	25922	None to poor	0-10%	Yellow-green
Staphylococcus aureus	25923	Inhibited	Inhibited	-
Staphylococcus aureus	6538	Inhibited	Inhibited	-

- **Storage**

The product is highly hygroscopic; keep the container always closed and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Temp. Min.:2 °C Temp. Max.:25 °C.

Note: Sterilize media immediately after reconstitution.

- **Bibliography**

Atlas, R. M. (2005). Handbook of media for environmental microbiology. CRC press.

Difco Manual (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.

Downes F P and Ito K. (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.