

## TM 952- BRILLIANT GREEN AGAR BASE W/ PHOSPHATES (IS: 5887 (Part III) 1999, reaffirmed 2005)

### INTENDED USE

For selective isolation of Salmonellae by inhibiting *E.coli*, *Proteus* and *Pseudomonas* species.

### PRODUCT SUMMARY AND EXPLANATION

BRILLIANT GREEN AGAR W/ PHOSPHATES was developed as per the recommendations of Rijks Institute Voorde Volksgezondheid (National Institute for Public Health), Utrecht. The medium is recommended by the BIS as a solid selective medium for the detection of Salmonella from food. It has been found to show improved performance with respect to recovery of smaller number of Salmonella species, greater inhibition of *Escherichia coli* and *Proteus* and *Pseudomonas* species.

### COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Meat extract	5.000
Yeast extract	3.000
Lactose	10.000
Sucrose	10.000
Disodium phosphate	1.000
Monosodium phosphate	0.600
Phenol red	0.090
Brilliant green	0.0047
Agar	12.000

### PRINCIPLE

The media contains peptic digest of animal tissue, Meat extract, Yeast extract which provides the essential nutrients for growth like nitrogen, vitamins, minerals and amino acids. Lactose and Sucrose are the fermentable carbohydrate providing carbon and energy. Lactose non-fermenters form colorless, transparent colonies. Brilliant green inhibits Gram-positive and most Gram-negative bacteria except, Salmonella. Phenol red is a pH indicator. Agar is a solidifying agent. Disodium phosphate and Monosodium phosphate are the buffering agent.

### INSTRUCTION FOR USE

- Dissolve 52.00 grams in 1000ml distilled water.
- Gently heat to boiling with gentle swirling and dissolve the medium completely.
- Do not autoclave.
- For maximum recovery, aseptically add sterile rehydrated contents of Sulpha Supplement (TS 013) and Cool to 45 - 50°C.
- Mix well and pour into sterile Petri plates

### QUALITY CONTROL SPECIFICATIONS

**Appearance of Dehydrated powder** : Light yellow to pink, Homogeneous free flowing powder



**Appearance of Prepared medium** : Greenish brown colored, clear to slightly opalescent gel  
**pH (at 25°C)** : 7.0± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of colony	Incubation Temperature	Incubation Period
<i>Salmonella enteritidis</i>	13076	50-100	Luxuriant	≥50%	Bright red	35-37°C	18-24 hours
<i>Salmonella typhimurium</i>	14028	50-100	Luxuriant	≥50%	Bright red	35-37°C	18-24 hours
<i>Escherichia coli</i>	25922	≥1000	Inhibited	0%	-	35-37°C	18-24 hours
<i>Proteus vulgaris</i>	13315	50-100	None-Poor	≤10%	Red	35-37°C	18-24 hours
<i>Pseudomonas aeruginosa</i>	10145	50-100	None-Poor	≤10%	Red	35-37°C	18-24 hours

### PACKAGING:

In 100 & 500 gm packaging size.

### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










**Product Deterioration:** Do not use powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### REFERENCES

1. Edel W. and Kampelmacher E.H., 1969, Bull. W.H.O., 41:297.
2. Anon, 1975, International Organization for Standardization, Meat and Meat products. Ref. Method, ISO:3565.
3. Anon, 1981, International Organization for Standardization, Microbiology Ref. Methods, ISO: 6579.
4. Anon, 1985, International Organization for Standardization, Milk and Milk Products, Ref. Method, ISO: 6785.
5. Read R. B. and Reyes A.L., 1968, Appl. Microbiol., 16:746.
6. Bureau of Indian Standards IS: 5887 (Part 3) 1999.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**

Revision: 05<sup>th</sup>Oct. 2019

