

## TM 1949 – AEROMONAS SELECTIVE AGAR (BSIBG AGAR)

### INTENDED USE

For the selective isolation of *Aeromonas* species from food.

### PRODUCT SUMMARY AND EXPLANATION

*Aeromonas* species occur widely in soil and water where these species cause disease in fish and amphibians. Also found in untreated and chlorinated drinking water, raw food and raw milk. It is observed that the major cause of gastrointestinal infections by *Aeromonas* species is because of ingesting infected water. The media was originally formulated for the selective isolation of *Aeromonas* species from faeces.

*Aeromonas* species do not ferment xylose and oxidase test can be performed on colonies that do not produce acid. The current formulation of *Aeromonas* Selective Agar (BSIBG Agar) is recommended for the isolation of *Aeromonas* species from food which is better than that of ampicillin containing media.

### COMPOSITION

Ingredients	Gms / Ltr
Beef extract	5.000
Proteose peptone	5.000
D-Xylose	10.000
Sodium thiosulfate	5.440
Brilliant green	0.005
Neutral red	0.025
Bile salt	8.500
Irgasan	0.005
Agar	11.500

### PRINCIPLE

Proteose peptone and beef extract provide essential nitrogenous compounds. D-xylose is source of carbon and energy. Gram positive organisms are inhibited by bile salts and brilliant green and gram negative organisms which possess a type A nitratase are inhibited by irgasan. Organisms which survive are differentiated by their ability to ferment xylose.

### INSTRUCTION FOR USE

- Dissolve 45.48 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

**Appearance of Powder** : Light yellow to pink homogeneous free flowing powder.  
**Appearance of prepared medium** : Blackish purple, clear to slightly opalescent gel forms in Petri plates.  
**pH (at 25°C)** : 7.0±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colony characteristics	Incubation Temperature	Incubation Period
<i>Aeromonas hydrophila</i>	7966	50-100	Luxuriant	≥70%	Translucent colonies	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	≥10 <sup>4</sup>	Inhibited	0%	-	35-37°C	18-24 Hours
<i>Proteus mirabilis</i>	25933	≥10 <sup>4</sup>	Inhibited	0%	-	35-37°C	18-24 Hours

**PACKAGING:**

In pack size of 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

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

**REFERENCES**

- Buchanan R. L. and Palumb S. A., 1985, J. Food Safety, 7:15.
- Burke V. et al 1984, Appl. Environ. Microbiol., 48:361.
- George W. L., 1987, Clin. Microbiol., Newsletter 9, 121.
- Hunt, G.H., Price, E.H., Patel, U., Messenger, L., Stow, P. and Salter, P. (1987), Isolation of Aeromonas species from faecal specimens. J. Clin. Pathol. 40, 1382-1384.
- Holmberg S. D., et al, 1986, Ann. Intern. Med., 105:683.
- Steering Group on the Microbiological Safety of Foods (SGMSF) in Methods for Use in Microbiological Surveillance, 1994, MAFF, Ergon House, London SWIP3TR.

 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 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**  
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