Technical Information

Bile Salts Agar

Product Code :DM1739S

Application: Bile salt agar is use for isolation and enumeration of bile tolerant enteric bacteria responsible for food poisoning.

Composition**

Ingredients	Gms / Litre
Peptic digest of animal tissue	10.000
Meat extract	5.000
Sodium chloride	5.000
Sodium taurocholate	5.000
Agar	15.000
Final pH (at 25°C)	8.5±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Bile Salt Agar is formulated and recommended by BIS for isolation, identification and enumeration of *Vibrio cholerae*[1].*Vibrio*species,like many other gram-negative bacteria, can tolnate and grow in the presence of relatively high concentration of bile salts [2]. On Bile Salt Agar colonies of *Vibrio* s have a distinctive appearance which may be seen by growing a known strain of *Vibrio cholerae* and comparing twith*Escherichiacoli* [1]. Suspicious growths of vibro may be tested & confirmed by slide agglutination test using polyvalent anti cholera antiserum. The medium contains peptic digest of animaltissue, meat extract which provides carbonaceous, nitrogenous compounds and other essential growth nutrients. Sodium chloride buffersthemediumwell. Sodium taurocholate inhibits most of the gram-negative organisms.

Methodology

Suspend 40 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Quality Control

Physical Appearance

Cream to yellow coloured homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.0% w/v aqueous solution at 25°C. pH : 8.5±0.2

pH range 8.3-8.7

Cultural Response/Characteristics

DM 1739S: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Growth
Enterobacter aerogenes 13048	luxuriant
Escherichia coli ATCC 25922	luxuriant
Salmonella Typhi ATCC 6539	luxuriant
Staphylococcus aureus ATCC 25923	inhibited
Vibrio cholera ATCC 15748	luxuriant

Storage and Shelf Life

Dried media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 days.

Further Reading

1. Bureau of Indian Standards IS : 5887 (Part V) Reaffirmed 1986.
2.Vanderzant C. and Splittstoesser D. (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd ed., APHA, Washington,DC

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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