

TM 674 - BILE SALT AGAR (IS: 5887 (Part V) 1976, reaffirmed 2005)

INTENDED USE

For isolation and enumeration of bile tolerant enteric bacilli.

PRODUCT SUMMARY AND EXPLANATION

Bile Salt agar is used for the isolation and enumeration of enteric bacilli. Enteric bacilli are gram negative nonsporing facultative anaerobes which are found mostly in the vertebrate intestine as normal flora or pathogen. These organisms can cause either intestinal or extra-intestinal infections. The medium composition is in accordance to the specifications detailed in the recommendations of BIS.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Peptone	10.00
Sodium chloride	5.000
Sodium taurocholate	5.000
Meat extract	5.000

PRINCIPLE

The medium contains the Peptone and Meat extract which provide carbon, nitrogenous compounds and other essential nutrients for the growth of enteric bacilli. Sodium taurocholate inhibits Gram-positive organisms. Sodium chloride maintains the osmotic balance of the medium. Agar is used as a solidifying agent.

INSTRUCTION FOR USE

1. Dissolve 40 grams in 1000 ml distilled water.
2. Gently heat to boiling with swirling to dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool to 45-50°C and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Light yellow, homogeneous free flowing powder
Appearance of Prepared medium- Basal medium	:	Light Yellow colored, clear to slightly opalescent gel
pH (at 25°C)	:	8.5± 0.2

INTERPRETATION

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

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Klebsiella aerogenes</i>	13048	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours
<i>Salmonella Typhi</i>	6539	50-100	Luxuriant	>=50%	35-37°C	18-24 Hours



<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	0%	35-37°C	18-24 Hours
<i>Vibrio cholerae</i>	25933	50-100	Luxuriant	≥50%	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. Bureau of Indian Standards, 1S:5887 (Part IV). (1976).
2. Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.). Standard methods for the examination of water and wastewater, 19th ed. American Public Health Association, Washington, D.C. (1995).
3. Pedersohn, T. & Skinnerc., E. A comparison of standard lactose broth with lauryl sulphate broth and with the Eijkman method for demonstrating fecal coliform bacteria. Appl. Microbial. 3, 55. (1955).
4. Report. The bacteriological examination of water supplies. Rep. publ. HZth med. Subj., Lond. no. 71. London: H.M. Stationery Office. (1939).
5. U.S. Food and Drug Administration. Bacteriological analytical manual, 8thed. AOAC International, Gaithersburg, MD. (1995).



Quantity



Lot / Batch Number



Temperature Unit



Best Before



QR Code



Catalogue No.



Consults Instructions for use :



Manufacturer

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

***For Lab Use Only**
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