Bile Salt Agar BIS

Intended Use
Bile Salt Agar is used for isolation and identification of bile tolerant enteric bacilli in compliance with BIS specification IS:5887(Part V) -1976.

Summary
On Bile Salt Agar colonies of Vibrios have a distinctive appearance which may be seen by growing a known strain of *Vibrio cholerae* and comparing it with *Escherichia coli*. Suspicious growths may be tested by slide agglutination using polyvalent cholera typing serum.

Principle
Peptone and Cara meat extract provide sources of nitrogen, minerals and amino acids. Sodium chloride maintains the osmotic equilibrium. Sodium taurocholate is a selective agent that inhibits growth of Gram-positive organisms. Agar is the solidifying agent. Species, like many *Vibrios* other Gram-negative bacteria, grow in the presence of relatively high levels of bile salts.

Formula*

Ingredients	**g/L**
Peptone	10.0
Cara Meat Extract#	5.0
Sodium Chloride	5.0
Sodium Taurocholate	5.0
Agar	15.0
Final pH (at 25 °C)	8.5 ± 0.2

*Adjusted to suit performance parameters.
#Equivalent to Meat Extract

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Food samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 40.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 20 minutes as per validated cycle.
4. Cool to 60°C-70°C.
5. Pour into sterile petridishes.

Quality Control

Dehydrated Appearance: Yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow to Yellow coloured, clear to slightly opalescent gel forms in petridishes.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for 18 to 24 hours.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 30°C-35°C for 18 hours.

Organisms (ATCC)	**Growth**
Escherichia coli (25922)	Good
Salmonella Typhi (6539)	Good
Klebsiella aerogenes (13048)	Good
Staphylococcus aureus subsp. *aureus* (25923)	Inhibited

Note: For Good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions/Limitations

1. Due to nutritional variations, some strains may show poor growth
2. Further biochemical and serological tests must be carried out for confirmation.

Warranty

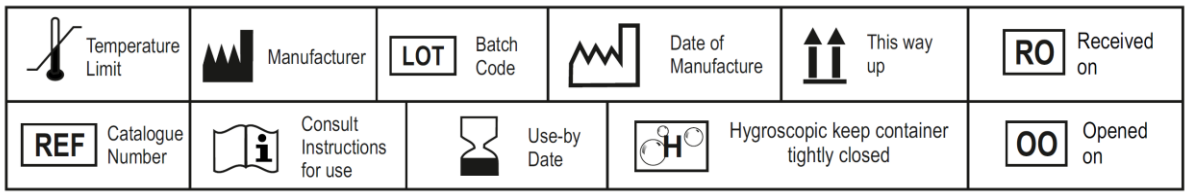
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

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.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	**Product description**	**Pack Size**
201020160100	Dehydrated Culture Media	100 g
201020160500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.