## **Bile Salt Agar**

#### **Intended Use**

Bile Salt Agar is used for the isolation and enumeration of bile tolerant enteric bacilli.

#### Summary

A variety of special differential and selective culture media are used in the isolation of enteric bacteria from clinical specimens. A selective agent sodium taurocholate has been incorporated in Bile Salt Agar specifically to enhance the growth of enteric bacilli.

## **Principle**

Tryptone and 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 ram-positive organisms. G Agar is the solidifying agent.

## Formula\*

Ingredients	g/L	
Tryptone	10.0	
Meat Extract	5.0	
Sodium Chloride	5.0	
Sodium Taurocholate	5.0	
Agar	18.0	
Final pH (at 25°C)	$8.2 \pm 0.2$	
*Adjusted to suit performance parameters		

## **Storage and Stability**

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-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 43.00 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 and 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
Klebsiella aerogenes (13048)	Good
Salmonella Typhi (6539)	Good
Escherichia coli (25922)	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
201020150100	Dehydrated Culture Media	100 g
201020150500	Dehydrated Culture Media	500 g

## 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.