# **Bile Salts Lactose Broth**



Medium used for the differentiation and isolation of Escherichia coli and coliforms from food.

## CONTENTS (Liter)

Tryptone	20.0 g
Lactose	5.0 g
Bile Salts No.3	1.5 g
Dipotassium Phosphate	4.0 g
Monopotassium Phosphate	1.5 g
Sodium Chloride	5.0 g
Final pH = $6.9 \pm 0.2$ at $25^{\circ}$ C.	

#### PROCEDURE

Suspend 37.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in tubes.

## INTERPRETATION

Bile Salts Lactose Broth is a medium used for the differentiation and isolation of *Escherichia coli* and coliforms from food. Tryptone provides essential sources of nitrogen and other growth nutrient. Lactose is a carbohydrate. Bile salts No.3 inhibits the growth of gram-positive bacteria. Sodium chloride maintains the osmotic balance.

## TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at  $35 \pm 1^{\circ}$ C or  $44^{\circ} \pm 1^{\circ}$ C for 24 - 48 hours. Refer appropriate references for recommended test procedure.

#### QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: light amber.

Incubation conditions: 35 ± 1°C or 44° ± 1°C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth
Escherichia coli	25922	50-100	good
Salmonella typhimurium	14028	50-100	good
Pseudomonas aeruginosa	27853	50-100	good
Staphylococcus aureus	25923	≥10³	inhibited

## STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

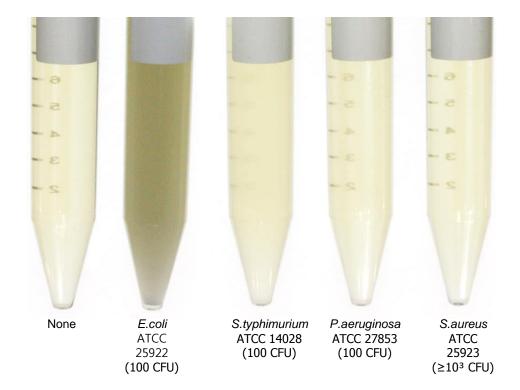
## REFERENCES

- 1. American Public Health Association (1998) Standard Methods for the Examination of Water and Wastewater. 20th Edn. APHA Inc. Washington DC.
- 2. Hajna, A.A. and Perry, C. A. (1943) Amer. J. Pub. Hlth. 33, 550-556.

#### PACKAGE

Cat. No : MB-B0996 Bile Salts Lactose Broth	500 G
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## MICROBIAL CULTURE IMAGES



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