

# Lactose Phenol Red Broth

Medium used for the cultivation and identification of coliforms.

## • CONTENTS (Liter)

|                              |        |
|------------------------------|--------|
| Peptone                      | 10.0 g |
| Lactose                      | 10.0 g |
| Sodium Chloride              | 5.0 g  |
| Phenol Red                   | 0.02 g |
| Final pH = 7.4 ± 0.2 at 25°C |        |

## • PROCEDURE

Suspend 25.02 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. Pour into tubes.

## • INTERPRETATION

Lactose Phenol Red Broth is a medium used for the cultivation and identification of coliforms. Peptones provide nitrogen, carbon, vitamins and minerals. Lactose is the fermentable carbohydrate. Sodium chloride maintains the osmotic balance. Phenol red is the pH indicator.

## • TECHNIC

Inoculate the specimen using a sterile needle or loop to the medium. Incubate at 36 ± 1°C for 18 - 48 hours. Slightly loosen the caps. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light pink

### Prepared medium

Appearance: clear to slightly opalescent

Color: red

Incubation conditions: 36 ± 1°C / 18 - 48 hours / loosen the caps

| Microorganism                 | ATCC  | Growth | Lactose fermentation  | Gas |
|-------------------------------|-------|--------|-----------------------|-----|
| <i>Escherichia coli</i>       | 25922 | good   | + (yellow)            | +   |
| <i>Klebsiella pneumoniae</i>  | 27736 | good   | + (yellow)            | +   |
| <i>Enterococcus faecalis</i>  | 29212 | good   | + (yellow)            | -   |
| <i>Salmonella typhimurium</i> | 14028 | good   | - (orange red to red) | -   |

**• 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. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Murray et al (1995) Manual of clinical microbiology 6th ed.
2. Forbes, Sahm and Weissfeld (2007) Diagnostic microbiology, 10th ed.
3. Vera (1950) Am. J. Public Health, 40:1267.
4. Holt, Krieg, Sneath, Staley and Williams (ed.) (1994) Bergey's Manual™ of determinative bacteriology, 9th ed. Williams & Wilkins, Baltimore, Md.

**• PACKAGE**

|  |       |
|--|-------|
| Cat. No : MB-L2186<br>Lactose Phenol Red Broth | 500 G |
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