

# MacConkey Broth



Medium used for the isolation and cultivation of coliforms in water, foods, dairy and pharmaceutical products.

\*Equally use with KP(MB-M1337P), USP, EP, MacConkey Broth Modified (without NaCl) (MB-M1149) and MacConkey Broth (Purple) (MB-M1171).

## • CONTENTS (Liter)

Gelatin Peptone	20.0 g
Lactose	10.0 g
Oxgall	5.0 g
Bromocresol Purple	0.01 g
Final pH = 7.3 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 35.01 G of powder in 1 L of distilled or deionized water. If necessary, adjust the pH to 7.3 ± 0.2. 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

MacConkey Broth is a medium used for the isolation and cultivation of coliforms in water, foods, dairy and pharmaceutical products. Gelatin peptone provides carbon, nitrogen and nutrients. Lactose is a carbon source. Oxgall inhibits Gram-positive microorganisms. Bromocresol purple is the pH indicator. Coliforms presence is shown by the appearance of a yellow color.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 43 ± 1°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: purple

Incubation conditions: 43 ± 1°C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	8739	50-100	good	yellow
<i>Staphylococcus aureus</i>	6538	≥10 <sup>3</sup>	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. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. ICSMF (1978).Microorganisms in foods: their significance and methods of enumeration. 2nd Ed.
2. Childs Eileen and Allen L.A. (1953). J. Hyg. Camb. 51 (4): 468-477.
3. Refer to the KP, USP and EP.

**• PACKAGE**

Cat. No : MB-M1337 MacConkey Broth	500 G
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