

Product Name : MacConkey Broth (Purple)

Medium for coliform detection in water and milk.

CONTENTS (G/L)

Peptone	20.0
Lactose	10.0
Bile Salts No.3	5.0
Sodium Chloride	5.0
Brom Cresol Purple	0.01
Final pH = 7.4 ± 0.2 at 25°C	

PROCEDURE

Suspend 40.01 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Dispense into final containers with Durham tubes. Sterilize by autoclave at 121°C for 15 minutes.

INTERPRETATION

MacConkey Broth (Purple) is a medium used in the presumptive phase for the presence of coliforms bacteria in water and foods, particularly suitable for samples with a high content of sodium chloride.

TECHNIC

Inoculate the specimen with stab using a sterile needle. Shake gently for spreading the bacteria. Incubate at 36 ± 1°C for 24-48 hours. Coliform presence is shown by the appearance of a yellow color and the production of gas, which collects at the top of the Durham tube. For the differential coliform test, each MacConkey tube showing acid and gas is then subcultured into a fresh tube of MacConkey Broth and incubated at 44 ± 0.5°C. Formation of gas within 48 hours is practically specific for *E. coli* and indicative of a faecal pollution of the water sample.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: purple.

Incubation conditions: 36 ± 1°C / 24-48 hours .

Microorganism	ATCC	Growth	Gas	Color
<i>Escherichia coli</i>	25922	good	+	yellow
<i>Klebsiella pneumoniae</i>	13883	good	+	yellow
<i>Pseudomonas aeruginosa</i>	27853	good	-	purple
<i>Staphylococcus aureus</i>	25923	partially inhibited		
<i>Enterococcus faecalis</i>	19433	partially inhibited		
<i>Proteus mirabilis</i>	12453	good	-	purple

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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 are evident. Store prepared medium at 2-6°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.

PACKAGE

Cat. No : MB-M1171 MacConkey Broth (Purple)	500 G
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