

MAC CONKEY BROTH PURPLE

For the enumeration of coliforms in water, dairy products and foodstuffs

TYPICAL FORMULA (g/l)

Peptone	20.00
Lactose	10.00
Bile Salts	5.00
Sodium Chloride	5.00
Bromocresol Purple	0.01

DIRECTIONS

Suspend 40g in 1000ml of cold distilled water, heat to dissolve, distribute into fermentation tubes and autoclave at 121°C for 15 minutes. With inocula greater than 1ml for 10ml of medium, use a multiple strength medium.

Final pH 7.4 ± 0.2

DESCRIPTION

MacConkey Broth Purple is used for the enumeration of coliforms in water, dairy products and foodstuffs. The litmus originally used as an indicator was substituted with neutral red. Because of the inhibitory effects of neutral red on *Escherichia coli* growth, the use of bromocresol purple was proposed. This indicator is less selective than neutral red, and more sensitive in recording pH variations in the medium.

TECHNIQUE

Liquid specimens are inoculated into the medium as they are, whereas solid ones should be homogenised.

The inoculation must be effected at 10% (v/v) in Durham tubes. If the inoculum is greater than 1ml it is necessary to use the medium at double strength, inoculating equal volumes of specimen and medium. Coliform presence is shown by the appearance of a yellow colour and the production of gas, which collects at the top of the Durham tube after 24-48 hours of incubation at 35°C.

The addition of MUG Supplement to MacConkey Broth Purple will allow the detection of *E. coli*. See MUG Supplement (cat. N° 4240026) for further details.

User quality assurance (37°C - 24hrs)

Productivity Control

E. coli ATCC 25922: growth, gas production

Selectivity control

S. aureus ATCC 25923: inhibited

STORAGE

Dehydrated medium: 10-30°C

User prepared tubes: 15 days at 2-8°C

REFERENCES

- APHA (1985) - Compendium of Methods for the Microbiological Examination of Foods, 2nd Ed.
- APHA (1985) - Standard Methods for the Examination of Water and Wastewater. 16th edition.
- Childs, Eileen and Allen, L.A. (1953) J. Hyg. Camb. **51**, 468.
- FDA (1976) - Bacteriological Analytical Manual for Foods. 4th Edition.
- OMS (1965) - Normes Internationales pour l'Eau de Boisson, deuxième édition.

PACKAGING

4016751	MacConkey Broth Purple,	100g (2.5 l)
4016752	MacConkey Broth Purple,	500g (12.5 l)