

## MacConkey Broth (Purple)

**SKU: 700004610, 700004611, 700004612, 700004613**

**NCM0193**

### Intended Use

MacConkey Broth Purple is used for the detection and enumeration of fecal coliforms (37°C) and *E. coli* (44°C). This medium is not intended for use in the diagnosis of disease or other conditions in humans.

### Description

The replacement of neutral red used in the original formulation by bromocresol purple makes the color change caused by acid producing organisms easier to read.

### Typical Formulation

Peptone	20.0 g/L
Lactose	10.0 g/L
Bile Salts	5.0 g/L
Bromocresol Purple	0.01 g/L

Final pH: 7.3 ± 0.2 at 25°C

Formula is adjusted and/or supplemented as required to meet performance specifications.

### Precaution

Refer to SDS

### Preparation

1. Dissolve 35 grams of the medium in one liter of purified water.
2. Heat with frequent agitation to completely dissolve the medium if necessary and dispense into tubes or bottles with inverted Durham tubes.
3. Autoclave at 121°C for 15 minutes.
4. Prepare double strength broth (70g/l) if 50ml or 10ml amounts of inoculum are to be added to equal volumes of broth. Prepare single strength broth (35g/l) if 1ml or 0.1ml amounts of inoculum are to be added to 10ml of broth.

### Test Procedure

37°C aerobically for coliforms, 44°C aerobically for *E. coli*. Use Durham tubes to detect gas production for *E. coli*. Turbidity, gas production. Lactose-fermenting organisms cause a color change from purple to yellow.

### Quality Control Specifications

**Dehydrated Appearance:** Powder is homogeneous, free flowing and beige.

**Prepared Appearance:** Prepared medium is clear and purple.

### Minimum QC:

*Escherichia coli* WDCM 00013

*Bacillus subtilis* WDCM 00070 (inhibition)

### Results

Refer to appropriate references for results.



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# Technical Specification Sheet



## **Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing or appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

## **Limitations of the Procedures**

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

## **Storage**

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

## **References**

1. Ministry of Health (1937). Bacteriological Tests for Graded Milk, Memo 139/Foods. H.M.S.O., London.
2. Minister of Health, Public Health Laboratory Service Water Committee (1969). The Bacteriological Examination of Water Supplies, 4th Edn. report No. 71. H.M.S.O., London.
3. World Health Organisation (1971). International Standards for Drinking Water, 3rd Edn, W.H.O., Geneva.

Record ID: FS-TSS-0158 Revision Number: 1.0 Effective Date: 2023-08-02 12:00 AM EDT



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