

## TM 2013 – BROMO CRESOL PURPLE BROTH W/DEXTROSE

### INTENDED USE

For identification of *Escherichia coli* and coliform bacteria from water samples.

### PRODUCT SUMMARY AND EXPLANATION

The coliform group of bacteria is the principal indicator of suitability of water for domestic, industrial or other uses. The coliform group density has been established as a criterion of the degree of pollution and thus of sanitary quality. Faecal Streptococci and Enterococci are also indicators of faecal pollution. Where it is claimed that drinking water has been processed for safety, the finding of such organism demonstrates a failure of the process. It is a valuable bacterial indicator for determining the extent of fecal contamination of recreational surface waters or drinking water. Bromocresol Purple Broth with Dextrose is used for the identification of *Escherichia coli* and coliforms from water. It is used for enrichment and determining the titre of coliforms in the bacteriological analysis of drinking water.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Meat extract	3.000
Sodium chloride	5.000
Dextrose (Glucose)	10.000
Bromo cresol purple	0.020

### PRINCIPLE

The medium contains peptone and meat extract, which supplies the essential nutrients for *E. coli* and other coliforms. Sodium chloride maintains the osmotic equilibrium of the medium. Dextrose upon fermentation by coliforms produce acid and is indicated by the pH indicator bromo cresol purple. It turns yellow at acidic pH.

### INSTRUCTION FOR USE

- Dissolve 28.02 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes containing inverted Durham's tubes.
- Sterilize by autoclaving at  $\Delta 115^{\circ}\text{C}$  for 20 minutes.  $\Delta$  corresponds to 10 psi pressure.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured, clear solution without any precipitate.
pH (at 25°C)	: 7.2±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period



<i>Alcaligenes faecalis</i>	8750	50-100	Fair-good	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Klebsiella aerogenes</i>	13048	50-100	Good-luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Good-luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours

**PACKAGING:**

In pack size of 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.










**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

1. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, 1995, Elsevier, Amsterdam
3. Deutsche Einheitsverfahren zur Wasser- Abwasser- und Schalmuntersuchung. VCH Verlagsgesellschaft, D-6940, Weinheim.
4. Verordnung über Trinkwasser und über Wasser für Lebensmittelbetriebe vom 12. Dezember, 1990, Bundesgesetzbl., Teil I;2613-2629.1990.



 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**