TM 1875- MacCONKEY BROTH PURPLE W/ BCP (ISO 9308-2-1990)

INTENDED USE

For presumptive identification of coliforms from water.

PRODUCT SUMMARY AND EXPLANATION

MacConkey Broth Purple w/ BCP is a modification of MacConkey Medium. MacConkey Broth Purple w/ BCP is recommended by ISO committee with the inclusion of bile salts, as a presumptive test medium for identification of coliforms from water and other materials of sanitary importance. Lactose fermenting organisms turn the medium yellow due to the acidity produced on lactose fermentation. The colour change of the dye is observed when the pH of the medium falls below 6.8. Lactose non-fermenting organisms like Salmonella and Shigella do not alter the appearance of the medium.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Lactose	10.000
Bile salts	5.000
Sodium chloride	5.000
Bromocresol purple	0.010

PRINCIPLE

The medium contains Peptic digest of animal tissue which provides essential growth nutrients. Lactose is the fermentable carbohydrate. Bile salts inhibits gram-positive organisms. Sodium chloride maintains the osmotic balance of the medium. In this medium, neutral red is substituted by the less inhibitory bromocresol purple dye Bromocresol purple is the pH indicator in the medium, which turns yellow under acidic condition.

INSTRUCTION FOR USE

- Dissolve 40.01 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into test tubes with Durham's tube.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool the tubes before inoculation.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow, homogeneous free flowing powder
Appearance of Prepared medium	:	Purple coloured, Clear to slightly opalescent solution
pH (at 25°C)	:	7.4± 0.2

INTERPRETATION

Cultural characteristics observed with after incubation.

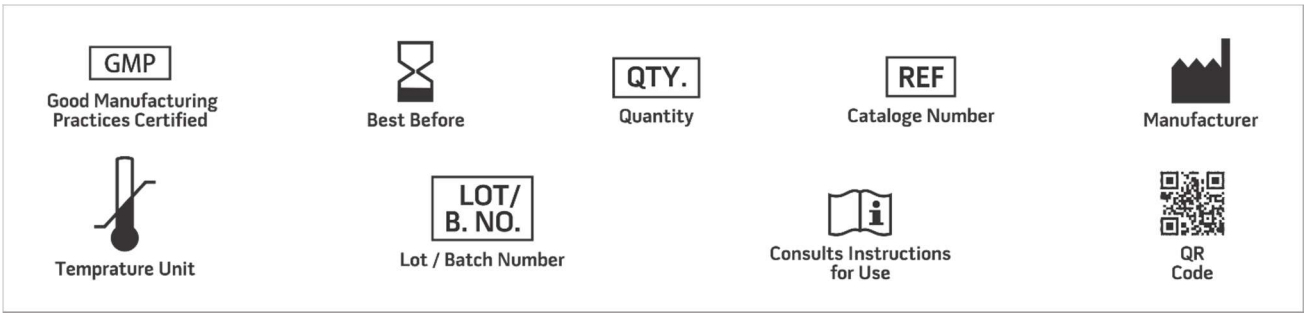
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid production	Gas production	Incubation Temperature	Incubation Period
Escherichia coli	8739	50-100	Luxuriant	Positive reaction (Yellow colour)	Positive reaction	30-35°C	18-48 Hours
Escherichia coli	25922	50-100	Luxuriant	Positive reaction (Yellow colour)	Positive reaction	30-35°C	18-48 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	Positive reaction (Yellow colour)	Positive reaction	30-35°C	18-48 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	-	-	30-35°C	18-48 Hours

PACKAGING:
In 100 & 500 gm packaging size.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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 powder show evidence of microbial contamination, discoloration, drying, or 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. Childs E. and Allen, 1953, J. Hyg: Camb. 51:468-477.
3. International Organization for Standardization (ISO), 1990, Draft ISO/ DIS 9308-2.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. MacConkey A. T., 1900, The Lancet, ii: 20



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

***For Lab Use Only**
Revision: 10th July 2020