

TM 2230 – MACCONKEY BROTH PURPLE (IS: 5401-1:2012)

INTENDED USE

For presumptive identification of coliforms from variety of specimens such as water, milk and food etc.

PRODUCT SUMMARY AND EXPLANATION

MacConkey Broth Purple is recommended for detection and estimation of coliforms in foodstuff and for presumptive identification of coliforms from a variety of specimens such as water, milk and food. This medium is recommended for use in microbiological examination of foodstuff and for direct inoculation of water samples for coliform counts. This medium is also used for the Examination of Milk and Dairy Products and pharmaceutical preparations. The selective action of this medium is attributed to Sodium taurocholate which are inhibitory to most species of gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as yellow coloured. The yellow colour is due to production of acid from lactose. Lactose non-fermenting strains, such as *Shigella* and *Salmonella* are colourless and transparent and typically do not alter appearance of the medium.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Lactose	10.000
Sodium taurocholate	5.000
Sodium chloride	5.000
Bromo cresol purple	0.020

PRINCIPLE

The medium contains lactose which as a source of energy and sodium chloride present helps in maintaining osmotic balance.

INSTRUCTION FOR USE

- Dissolve 40.02 gm of medium in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool the tubes before inoculation.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured clear solution in tubes.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Acid	Gas	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	8739	50 -100	Luxuriant	>=70%	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	6538	>=10 ⁴	Inhibited	0%	-	-	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50 -100	Luxuriant	>=70%	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Enterobacter aerogenes</i>	13048	50 -100	Luxuriant	>=70%	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Salmonella Choleraesuis</i>	12011	50 -100	Fair-good	20-40%	Negative reaction	Negative reaction	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	>=10 ⁴	Inhibited	0%	-	-	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 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. Bureau of Indian Standards IS : 5401 - 1969.
2. Speck M. (Ed.), 1985, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.
3. Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 1992, Standard Methods for the Examination of Water and Wastewater, 18th ed., APHA, Washington, D.C.
4. Marshall R. (Ed.), 1992, Standard Methods For the Examination of Dairy Products, 16th ed., APHA, Washington, D.C.
5. The United States Pharmacopoeia XXI and the National Formulary, 16th ed., 1985, United States Pharmacopeial Convention, Inc., Washington, D.C.



 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 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**
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