

CM 21070 - M-PC BROTH

INTENDED USE

For enumerating microorganisms by membrane filtration.

PRODUCT SUMMARY AND EXPLANATION

Bacteria can be removed from liquids by passing them through filters with very small pores that trap bacteria, but in general, not *Mycoplasmas* or viruses. The membrane filter technique is highly reproducible, can be used to test relatively large sample volumes, and usually yields numerical results more rapidly. This technique is extremely useful in monitoring drinking water and a variety of natural waters.

M-PC Broth used for enumerating microorganisms by membrane filtration has composition similar to Plate Count Agar, except agar. Also M-PC Broth has the media ingredients in double concentrations, then the agar medium. This medium can therefore be used as a general purpose non-selective medium to determine total bacterial counts from food and water sample by the membrane filtration procedure.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Yeast extract	5.000
Dextrose	2.000

PRINCIPLE

Casein enzyme hydrolysate provides carbon and nitrogen source. Yeast extract serves as a source of trace elements, vitamin B complex nutrients and essential amino acids. Dextrose serves as the carbon source.

INSTRUCTION FOR USE

- Dissolve 17 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium** : Light yellow coloured clear solution without any precipitate.
- pH (at 25°C)** : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	good	40-50%	35-37°C	18-24 Hours
<i>Enterococcus faecalis</i>	19433	50-100	good	40-50%	35-37°C	18-24 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	good	40-50%	35-37°C	18-24 Hours



<i>Staphylococcus aureus</i>	25923	50-100	good	40-50%	35-37°C	18-24 Hours
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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. Eaton A. D., Clesceri L. S. and Greenberg A. W., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C.
2. Collins C. H., Lyne P. M., Grange J. M., 1995, Collins and Lyne Microbiological Methods, 7th Ed., Butterworth Heinemann.

 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**

