

TM 2196 - M-NUTRIENT BROTH

INTENDED USE

For enumeration of bacteria using membrane filter technique.

PRODUCT SUMMARY AND EXPLANATION

M-Nutrient Broth is used for enumeration of non-fastidious bacteria using membrane filtration technique. The medium was originally developed as Nutrient Broth as is mentioned in Standard Methods for Examination of Water and Waste Water.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	40.000
Yeast extract	6.000

PRINCIPLE

This medium has relatively simple formulation with high amount of peptic digest of animal tissue and low amount of yeast extract. These nutrients support the growth of non-fastidious microorganisms and thus enables the user to enumerate and cultivate the bacteria in any liquid materials using membrane filtration technique. Sterile cotton absorbent pads are saturated with about 2 ml M-Nutrient Broth. Sterile membrane filters used for filtering water samples are aseptically placed on the saturated cotton absorbent pads.

INSTRUCTION FOR USE

- Dissolve 46 grams in 1000 ml distilled water.
- Heat if necessary to ensure complete solution.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder
Appearance of prepared medium pH (at 25°C)	: Light yellow coloured clear solution without any precipitate : 7.2±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	luxuriant	≥70 %	35-37°C	18-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	luxuriant	≥70 %	35-37°C	18-48 Hours



<i>Pseudomonas aeruginosa</i>	27853	50-100	luxuriant	>=70 %	35-37°C	18-48 Hours
<i>Staphylococcus aureus</i>	25923	50-100	luxuriant	>=70 %	35-37°C	18-48 Hours
<i>Staphylococcus epidermidis</i>	12228	50-100	luxuriant	>=70 %	35-37°C	18-48 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. Eaton A. D., Clesceri L. S. and Greenberg A. E., (Ed.), 1995, Standard Methods for the Examination of water and Wastewater, 19th Ed., American Public Health Association, Washington, D.C.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore

 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**
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