

# mEndo Broth



Selective medium used for enumeration of coliforms in water by the membrane filter method.

\*Equally use with NIER (MB-E1220N), mEndo Broth Base (MB-E2163).

## • CONTENTS (Liter)

Yeast Extract	1.5 g
Tryptose	10.0 g
Casiton	5.0 g
Lactose	12.5 g
Thiopeptone	5.0 g
Sodium Desoxycholate	0.1 g
Sodium Chloride	5.0 g
Dipotassium Phosphate	4.375 g
Monopotassium Phosphate	1.375 g
Sodium Lauryl Sulfate	0.05 g
Sodium Sulfite	2.1 g
Basic Fuchsin	1.05 g
Final pH = 7.2 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 48.05 G of powder in 980 mL of distilled or deionized water. Add 20 mL of ethyl alcohol 95%. Heat to boiling until completely dissolved. Avoid overheating and DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Dispense in tubes.

## • INTERPRETATION

m-Endo Broth is a general purpose medium used for enumeration of coliforms in water by the membrane filter method. Peptones provide nitrogen, carbon, vitamins and minerals. Lactose Sodium desoxycholate, sodium sulfite and basic fuchsin inhibit Gram-positive bacteria. Sodium chloride maintains osmotic balance. Phosphates are buffering agents. Sodium lauryl sulfate inhibits non-coliform organisms.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Incubate at 36 ± 1°C for 24 ± 2 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pinkish purple

### Prepared medium

Appearance: opalescent with precipitates

Color: pinkish red

Incubation conditions: 36 ± 1°C / 24 ± 2 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	red with green metallic sheen
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless to pink
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	inhibited	-

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Fifield, Schaufus (1958). J. Amer. Water works assoc. 50:193.
2. Eaton, Clesceri, Greenberg. (1995). Standard methods for the examination of water and wastewater, 19th ed.
3. APHA (1985). Standard Methods for the examination of water and wastewater, 16th ed.
4. Refer to the NIER.

## • PACKAGE

Cat. No : MB-E1220 mEndo Broth	500 G
-----------------------------------	-------