mEndo Agar LES

Medium used for the isolation and identification of coliforms in water by membrane filter method.
*Equally use with NIER (MB-E2162N).

• CONTENTS (Liter)

Yeast Extract	1.2 g
Tryptose	7.5 g
Casiton	3.7 g
Lactose	9.4 g
Thiopeptone	3.7 g
Sodium Desoxycholate	0.1 g
Sodium Chloride	3.7 g
Monopotassium Phosphate	3.3 g
Dipotassium Phosphate	1.0 g
Sodium Lauryl Sulfate	0.05 g
Sodium Sulfite	1.6 g
Basic Fuchsin	0.8 g
Agar	15.0 g

Final pH = 7.5 ± 0.2 at 25°C

• PROCEDURE

Suspend 51.05 G of powder in 980 mL of distilled or deionized water. Add 20 mL of ethyl alcohol 95%. If necessary, adjust pH to 7.2 ± 0.2. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.
**Plates should be protected from light and use within 96 hours.

• INTERPRETATION

mEndo Agar LES is a medium used for the isolation and identification of coliforms in water by membrane filter method. Yeast extract supplies B-complex vitamins, which stimulate the bacterial growth. Tryptose, casiton and thiopeptone provide nitrogen, carbon and minerals. Lactose is the carbohydrate. Sodium desoxycholate and sodium lauryl sulfate are added as inhibitors. Sodium chloride maintains the osmotic balance. Monopotassium phosphate and dipotassium phosphate are the buffering agents. Sodium sulfite is added to decolorize the basic fuchsin solution. Basic fuchsin is the pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium or using by membrane filter method. Incubate at 35 ± 0.5°C for 24 ± 2 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: purple
Prepared medium
Appearance : slightly opalescent with precipitates
Color: light pink
Incubation conditions: 35 ± 0.5°C / 24 ± 2 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Escherichia coli	25922	50-100	good	red colonies with metallic sheen
Salmonella typhimurium	14028	50-100	good	colorless to pink colonies
Staphylococcus aureus	25923	≥10^3	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. Store prepared medium at 2 - 8°C. Plates should be protected from light and use within 96 hours.

• REFERENCES

1. McCarthy, J.A., J.E. De Laneg, and R.J. Grasso (1961). Water and Sewage Works, 108, 238.
2. APHA (1985). Standards Methods for the Examination of Water and Wastewater, 16th Ed.
3. Refer to the NIER.

• PACKAGE

Cat. No : MB-E2162 mEndo Agar LES	500 G

• MICROBIAL CULTURE IMAGES

None

Escherichia coli ATCC 25922 (50-100CFU)

Staphylococcus aureus
ATCC 25923 ≥10^3CFU

Incubation conditions : 35 ± 0.5°C 24h

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