

Medium used for the isolation and identification of coliforms, especially Escherichia coli.

CONTENTS (Liter)

| Peptone | 20.0 g |
|----------------------------------|--------|
| Lactose | 10.0 g |
| Sodium Chloride | 5.0 g |
| Sodium Sulfite | 2.5 g |
| Basic Fuchsin | 0.5 g |
| Agar | 20.0 g |
| Final pH = 7.4 \pm 0.2 at 25°C | - |

PROCEDURE

Suspend 58.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes. **Plates should be protected from light.

INTERPRETATION

Endo Agar Base, DEV is a medium used for the isolation and identification of coliforms, especially *Escherichia coli*. Peptone provides nitrogen, carbon and minerals. Lactose is the carbohydrate. Sodium chloride maintains the osmotic balance. 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. Incubate at 36 \pm 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

<u>Dehydrated medium</u> Appearance: free-flowing, homogeneous Color: purple <u>Prepared medium</u> Appearance : slightly opalescent with precipitates Color: light pink Incubation conditions: $36 \pm 1^{\circ}C / 18 - 24$ 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.

• REFERENCES

- 1. Endo, 1904, Zentralbl. Bakteriol., Abt. I. Orig., 35:109.
- 2. Eaton A. D., Clesceri L. S., Rice E. W. and Greenberg A. W., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C.
- 3. Downes F. P. and Ito K.,(Eds.), 2001, Compendium of Methods for the Microbiological Examination of foods, 4th Ed., American Public Health Association, Washington, D.C.

PACKAGE

Cat. No : MB-E2161 Endo Agar Base, DEV

500 G

