EC (*Escherichia coli*) Broth

Medium used for the identification and determination of faecal coliforms in water, wastewater, shellfish and foods.
*Eqaully use with MFDS (MB-E1063K) and NIER (MB-E1063N).

• CONTENTS (Liter)

Peptone	20.0 g
Lactose	5.0 g
Bile Salt Mixture	1.5 g
Dipotassium Phosphate	4.0 g
Monopotassium Phosphate	1.5 g
Sodium Chloride	5.0 g

Final pH = 6.9 ± 0.2 at 25°C

• PROCEDURE

Suspend 37.0 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 tubes with durham tubes.

• INTERPRETATION

EC (*Escherichia coli*) Broth is a medium used for the identification and determination of faecal coliforms in water, wastewater, shellfish and foods. Peptone provides nitrogen, carbon, vitamins and minerals. Lactose is a fermentable carbohydrate. Bile salt mixture is the selective agent against Gram-positive bacteria. Dipotassium phosphate and monopotassium phosphate are the buffering agents. Sodium chloride supplies essential electrolytes for transport and maintains the osmotic balance.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 44.5 ± 0.2°C for 24 ± 2 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free flowing, homogeneous
Color: light beige
Prepared medium
Appearance : slightly opalescent with slightly precipitates
Color: light amber
Incubation conditions: 44.5 ± 0.2°C / 24 ± 2 hours

Microorganism	ATCC	Inoculum CFU	Growth	Gas
Escherichia coli	25922	10^3	good	+
Enterococcus faecalis	29212	≥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.

• REFERENCES

1. Eaton, A.D., L.S. Clesceri, and A.E. Greenberg (ed.).1995. Standard methods for the examination fo water and wastewater, 19th ed. American Public Health Association, Washington D.C.
2. Association of Officialn Analytical Chemists. 1995. Bacteriological analytical manual , 8th ed. AOAC International, Gaithersburg, MD.
3. Vanderzant, C., and D.F. Splittstoesser (ed.). 1992. Compendium of methods for the microbiological examination of food, 3rd ed. American Public Health Association, Washington D.C.
4. Refer to the MFDS and NIER.

• PACKAGE

Cat. No : MB-E1063 EC (*Escherichia coli*) Broth	500 G