

Medium used for the isolation and identification of Enterococci. \*Equally use with NIER (MB-E0644N), Bile Esculin Azide Agar (MB-B1001), Pfizer Selective Enterococcus Agar (MB-P1319) and Enterococci Agar.

## CONTENTS (Liter)

Peptone C	17.0 g
Peptone B Yeast Extract	3.0 g 5.0 g
Oxgall (Bile Bacteriological)	10.0 g
Sodium Chloride	5.0 g
Trisodium Citrate	1.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Sodium Azide	0.25 g
Agar	15.0 g
Final pH = 7.1 $\pm$ 0.2 at 25°C	

#### PROCEDURE

Suspend 57.75 G of powder in 1L 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.

#### INTERPRETATION

Enterococcosel Agar is a medium used for the isolation and identification of Enterococci. Peptone C, peptone B and yeast extract provide carbon, nitrogen, vitamins and minerals. Oxgall and trisodium citrate are used to inhibit Gram-positive bacteria other than Enterococci. Sodium chloride maintains the osmotic balance. Enterococci and group D streptococci hydrolyze esculin to esculetin and dextrose. Esculetin reacts with ferric ammonium citrate and forms a zone of black or dark brown precipitates around the colonies. Sodium azide inhibits Gram-negative microorganisms. Agar is the solidifying agent.

#### TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36  $\pm$  1°C for 24  $\pm$  2 hours. Refer appropriate references for recommended test procedure.

#### QUALITY CONTROL FOR USE

<u>Dehydrated medium</u> Appearance: free flowing, homogeneous Color: beige <u>Prepared medium</u> Appearance : clear Color: tan Incubation conditions:  $36 \pm 1^{\circ}C / 24 \pm 2$  hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Enterococcus faecalis	29212	50 -100	good	blackening
Escherichia coli	25922	≥10 <sup>3</sup>	partially inhibited	-
Streptococcus pyogenes	19615	≥10³	partially 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. Isenberg, H.D., D. Goldberg, and J. Sampson. (1970). Appl. Micr., 20, 433-436.
- 2. ISO/FDIS 7899-2: 2000. Water Quality Detection and enumeration of intestinal enterococci.
- 3. NCCLS document M22-A2, 1996. Approved Standard.
- 4. Facklam, Sahm and Teixera. 1999. In Murray, Baron, Pfaller, Tenover and Yolken (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
- 5. Refer to the NIER.

### PACKAGE

Cat. No : MB-E0644 500 G

