

Medium used for the isolation and cultivation of Gram-positive organisms, such as Staphylococci and Streptococci from specimens with mixed bacterial flora.

CONTENTS (Liter)

Pancreatic Digest of Casein	15.0 g
Papaic Digest of Soybean Meal	5.0 g
Sodium Chloride	5.0 g
Phenylethyl Alcohol	2.5 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25° C	

PROCEDURE

Suspend 42.5 G of powder in 1 L or 950 mL 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. If necessary, add 5% of Sheep Blood Defibrinated (MB-S1876). Mix well. Pour into petri dishes.

• INTERPRETATION

Medium used for the isolation and cultivation of Gram-positive organisms, such as Staphylococci and Streptococci from specimens with mixed bacterial flora. Pancreatic digest of casein and papaic digest of soybean meal provide carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance. Phenylethyl alcohol inhibits most Gram-negative organisms, particularly Proteus spp. by inhibiting DNA synthesis. If added sheep blood defibrinated, it can't be used for the determination of hemolytic reactions since atypical reactions may be observed. Agar is the solidifying agent.

TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 \pm 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

<u>Dehydrated medium</u> Appearance: free-flowing, homogeneous Color: light beige <u>Prepared medium</u> Appearance : slightly opalescent Color: light amber Incubation conditions: $35 \pm 2^{\circ}$ C / 18 - 48 hours

Microorganism	ATCC	Growth
Enterococcus faecalis	29212	good
Staphylococcus aureus	25923	good
*Streptococcus pyogenes	19615	good
Proteus mirabilis	25933	partially inhibited

* Supplement with 5% Sheep Blood Defibrinated (MB-S1876) and incubate under microaerobic condition.

• 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. Brewer, J. H., and B. D. Lilley. 1949. Paper presented at the December meeting of the Maryland Association of Medical and Public Health Laboratories.
- 2. Lilley, B. D., and J. H. Brewer. 1953. The selective antibacterial action of phenylethylalcohol. J. Pharm. Assoc.42:6.
- 3. Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Yolken (eds.). Manual of clinical microbiology, 6 th ed. American Society of Microbiology, Washington, D.C.
- 4. Isenberg, H. D. 1992. Clinical microbiology procedures handbook, American Society for Microbiology, Washington, D.C.
- 5. Washington, J. A., Jr. 1981. Laboratory procedures in clinical microbiology. Springer-Verlag, New York.
- 6. Casman, E. P. 1947. A noninfusion blood agar base for neisseriae, pneumococci and streptococci. Am. J. Clin. Pathol. 17:281-289.
- 7. MacFaddin, J. F. 1985. Media for the isolation-cultivation-identification-maintenance of medical bacteria, vol. 1 Williams & Wilkins, Baltimore, MD.

PACKAGE

Cat. No : MB-P0612 Phenylethyl Alcohol Agar

500 G



