# **Liver Veal Agar**



Medium used for the isolation and cultivation of anaerobic and fastidious aerobic bacteria. \*Equally use with Liver-Veal Egg Yolk Agar (MFDS) (MB-L0609K).

# CONTENTS (Liter)

Liver Infusion	9.0 g
Veal Infusion	6.4 g
Proteose Peptone	20.0 g
Gelatin	20.0 g
Soluble Starch	10.0 g
Isoelectric Casein	2.0 g
Dextrose	5.0 g
Neopeptone	1.3 g
Tryptone	1.3 g
Sodium Chloride	5.0 g
Sodium Nitrate	2.0 g
Agar	15.0 g
Final pH = $7.3 \pm 0.2$ at $25$ °C	

# PROCEDURE

Suspend 97.0 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. If necessary, aseptically add 10% of Egg Yolk Emulsion (MB-E1864) for anaerobic organisms (Liver-Veal Egg Yolk Agar). Mix well. Pour into petri dishes.

## INTERPRETATION

Liver Veal Agar is a medium used for the isolation and cultivation of anaerobic and fastidious aerobic bacteria. Liver Infusion, veal Infusion, proteose peptone, gelatin, isoelectric casein, neopeptone and tryptone provide carbon, nitrogen, amino acids and various vitamins. Soluble starch enhances the growth of anaerobic bacteria. Dextrose is a source of carbohydrate. Sodium chloride maintains the osmotic balance. Sodium nitrate serves as the source of nitrogen. Agar is the solidifying agent.

#### TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36  $\pm$  1°C for 18 - 48  $\pm$  3 hours under appropriate conditions. Refer appropriate references for recommended test procedure.

## QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions:  $36 \pm 1^{\circ}\text{C} / 18 - 48 \pm 3$  hours under appropriate conditions

Microorganism	ATCC	Inoculum CFU	Growth
Clostridium perfringens	13124	10 <sup>2</sup> -10 <sup>3</sup>	good
Clostridium sporogenes	11437	10 <sup>2</sup> -10 <sup>3</sup>	good
Neisseria meningitidis	13100	10 <sup>2</sup> -10 <sup>3</sup>	good
Streptococcus pneumoniae	6305	10 <sup>2</sup> -10 <sup>3</sup>	good

## 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. Spray. 1930. J. Lab. Clin. Med. 16:203.
- 2. Spray. 1936. J. Bacteriol. 32:135.
- 3. U.S. Food and Drug Administration. 1995. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
- Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
- 5. Atlas. 1993. Handbook of microbiological media. CRC Press, Boca Raton, Fla.
- 6. U.S. Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. 1999. Biosafety in microbiological and biomedical laboratories, 4th ed. HHS Publication No. (CDC) 93-8395. U.S. Government Printing Office, Washington, D.C.
- 7. Isenberg (ed.). 1992. Clinical microbiology procedures handbook, vol.1. American Society for Microbiology, Washington, D.C.
- 8. Murray, Baron, Pfaller, Tenover and Yolken (ed.). 1999. Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
- Refer to the MFDS.

# PACKAGE

Cat. No : MB-L0609 Liver Veal Agar	500 G

