

Medium used for the cultivation and enumeration of Clostridium spp. and other anaerobes from foods and clinical specimens.

*Equally use with KP (MB-R1096P), USP, EP and Clostridium Broth (MB-C1056).

• CONTENTS (Liter)

| Peptone | 10.0 g |
|----------------------------------|--------|
| Beef Extract | 10.0 g |
| Yeast Extract | 3.0 g |
| Starch | 1.0 g |
| Dextrose | 5.0 g |
| L-Cysteine HCI | 0.5 g |
| Sodium Chloride | 5.0 g |
| Sodium Acetate | 3.0 g |
| Agar | 0.5 g |
| Final pH = 6.8 \pm 0.2 at 25°C | |

PROCEDURE

Suspend 38.0 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.

INTERPRETATION

Reinforced Clostridial Medium is a medium used for the cultivation and enumeration of Clostridium spp. and other anaerobes from foods and clinical specimens. Peptone and beef extract provide nitrogen, carbon, amino acids and minerals. Yeast extract supplies B-complex vitamins which stimulate the growth of microorganisms. Starch detoxifies metabolic byproducts in low concentrations. Dextrose provides an energy source. L-Cysteine HCI provides growth factors. Sodium chloride maintains the osmotic balance. Sodium acetate serves as the buffering agent. Agar is the solidifying agent.

TECHNIC

Inoculate the specimen using a sterile needle to the middle of the medium. Incubate at 30 - 35°C for 18 - 48 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium Appearance: free-flowing, homogeneous Color: beige <u>Prepared medium</u> Appearance: slightly opalescent Color: light amber Incubation conditions: 30 - 35°C / 18 - 48 hours under anaerobic condition

| Microorganism | ATCC | Inoculum CFU | Growth |
|-------------------------|-------|--------------|--------|
| Clostridium perfringens | 13124 | 50-100 | good |
| Clostridium sporogenes | 11437 | 50-100 | good |
| Bacteroides fragilis | 25285 | 50-100 | 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. ISO 6461/1 (1986) Water quality Detection and enumeration of the spores of sulfite-reducing anaerobes (cl ostridia) Part 1: Method by enrichment in a liquid medium.
- 2. Gibbs, M.B. & Freame B. (1965). J. Appl. Bact .28: 95-111.
- 3. Refer to KP, USP and EP.

PACKAGE

Cat. No : MB-R1096 Reinforced Clostridial Medium

500 G

