

Clostridium Broth

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

• CONTENTS (Liter)

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

• PROCEDURE

Suspend 38.0 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 tubes.

• INTERPRETATION

Clostridium Broth is a medium used for the cultivation and enumeration of Clostridium spp. and other anaerobes from foods and clinical samples. Peptone and beef extract provide amino acids, minerals and other nitrogenous substances to support bacterial growth. Yeast extract provides vitamins. Dextrose and soluble starch are a carbohydrate source. Sodium chloride maintains osmotic balance. Sodium acetate is a selective agent. L-Cysteine HCl provides essential nutrients for the growth of bacteria. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the middle of the medium. Incubate at 36 ± 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

Prepared medium

Appearance: clear

Color: light amber

Incubation conditions: 36 ± 1°C / 18 - 24 hours under anaerobic condition

| Microorganism | ATCC | Inoculate CFU | Growth |
|--------------------------------|-------|---------------|--------|
| <i>Clostridium perfringens</i> | 13124 | 50-100 | good |
| <i>Clostridium sporogenes</i> | 11437 | 50-100 | good |
| <i>Bacteroides fragilis</i> | 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 or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Levett (1985) J. Clin. Pathol. 38: 233-234.
2. Gibbs, M.B., and B. Freame. (1965). J. Appl. Microbiol. 28: 95-143.
3. European Pharmacopeia, 3rd ed. 2001.
4. ISO 6461/1 (1996) Water Quality-Detection and enumeration of the spores of sulfite reducing anaerobes(clostridia)-Part 1.

• PACKAGE

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|---|-------|
| Cat. No : MB-C1056 Clostridium Broth | 500 G |
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