

# Clostridium Perfringens Agar



Medium used for the isolation and cultivation of *Clostridium perfringens* from meat and other foodstuffs.

\*Equally use with MFDS (MB-C1382K).

## • CONTENTS (Liter)

Heart Infusion	5.0 g
Casein Peptone	10.0 g
Proteose Peptone	10.0 g
Sodium Chloride	5.0 g
Lactose	10.0 g
Phenol Red	0.05 g
Agar	20.0 g
Final pH = 7.5 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 60.05 G of powder in 900 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. Aseptically add 10% of Egg Yolk Emulsion (MB-E1864) and 2 vials of Kanamycin Solution (MB-K0784). Mix well. Pour into petri dishes.

### Kanamycin Solution

1 vial contents (each vial is sufficient for 500 mL of medium)

Kanamycin 0.1 g

## • INTERPRETATION

Clostridium Perfringens Agar is a medium used for the isolation and cultivation of *Clostridium perfringens* from meat and other foodstuffs. Heart infusion, casein peptone and proteose peptone provide carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance. Lactose is the fermentable carbohydrate. Phenol red is a pH indicator. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 18 - 24 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pink

### Prepared medium

Appearance: opaque

Color: orange-red

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

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Clostridium perfringens</i>	13124	50-100	good	yellow colonies with halo
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	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. Harmon, S.M., O.A. Kautter, and J.T. Peeler . (1971) Improved medium for enumeration of *Clostridium perfringens*. *App. Microbiol.* 22: 688.
2. Haushild, A.H.W., and A. Hilsheimer. (1974) Evaluation and modifications of media for enumeration of *C. perfringens*. *App. Microbiol.* 27:78.
3. Shehidi, SA., and AR. Ferguson (1971). *Appl. Microbiol.* 21: 500-606.
4. ISO 7937: 1997. 2nd ed. *Microbiology of food and animal feeding stuffs.*
5. Refer to the MFDS.

**• PACKAGE**

Cat. No : MB-C1382 Clostridium Perfringens Agar	500 G
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