Perfringens Agar Base

Medium used for the isolation and cultivation of *Clostridium perfringens.*
*Equally use with Clostridium Perfringens Agar Base (MB-C1207), Perfringens (OPSP) Agar (MB-P2223) and SFP (Shahidi Feruson Perfringens) Agar (MB-S0614).

• CONTENTS (Liter)

Peptone	31.0 g
Ferric Ammonium Citrate	1.0 g
Sodium Metabisulfite	1.0 g
Agar	14.0 g

Final pH = 7.5 ± 0.2 at 25°C

• PROCEDURE

Perfringens (OPSP) Agar
Suspend 47.0 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. Aseptically 2 vials of Perfringens Selective supplement, OPSP (MB-C2549). Mix well. Pour into petri dishes.

Perfringens Selective supplement, OPSP
1 vial content (each vial is sufficient for 500 mL of medium)

Sodium Sulfadiazine	0.05 g
Oleandomycin Phosphate	0.00025 g
Polymixin B	5,000 IU

Perfringens (SFP / TSC) Agar
Suspend 47.0 G of powder in 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. Aseptically add 50 mL of Egg Yolk Emulsion (MB-E1864) and 2 vials of Perfringens Selective supplement, SFP (MB-P2550) or Perfringens Selective supplement, TSC (MB-P2551). Mix well. Pour into petri dishes.

Perfringens Selective supplement, SFP
1 vial content (each vial is sufficient for 500 mL of medium)

Kanamycin Sulfate	0.006 g
Polymyxin B	15,000 IU

Perfringens Selective supplement, TSC
1 vial content (each vial is sufficient for 500 mL of medium)

D-Cycloserine	0.2 g

• INTERPRETATION

Perfringens Agar Base is a medium used for the isolation and cultivation of *Clostridium perfringens*. Peptone provides carbon, nitrogen, vitamins, and amino acids. Ferric ammonium citrate and sodium metabisulfite act as indicators of sulfite reduction by *Clostridium perfringens*, which produces black colonies. Agar is the solidifying agent. Perfringens Selective supplements are antibiotic reagents.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Overlay with 10 - 15 mL of Perfringens Agar (OPSP or SFP or TSC, egg yolk emulsion free). Incubate at 36 ± 1°C for 18 - 48 hours under anaerobic 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 / opaque
Color: amber
Incubation conditions: 36 ± 1°C / 18 - 48 hours under anaerobic conditions

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Clostridium perfringens	13124	50-100	good	black colonies
Escherichia coli	25922	≥10^3	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

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4. Shahidi, S.A. and Ferguson, A.R. (1971). A new quantitative and confirmatory medium for C. perfringens in food. Appl. Microbiol. 21:500-506.
5. Marshall, R.S., Steenberger, J.F. and McClung, L.S. (1965). A rapid technique for the enumeration of C. perfringens. Appl. Microbiol. 13: 559.
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• PACKAGE

Cat. No : MB-P2224 Perfringens Agar Base	500 G