Oxford Agar

Medium used for the isolation and cultivation of Listeria spp. from food, milk and dairy products.
*Equally use with MFDS (MB-O1310K).

• CONTENTS (Liter)

Columbia Blood Agar Base	39.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Lithium Chloride	15.0 g
Agar	2.0 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 57.5 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 add 2 vials of Oxford Agar supplement (MB-O2539). Mix well. Pour into petri dishes.

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

Cycloheximide	0.2 g
Colistin Sulfate	0.01 g
Acriflavin	0.0025 g
Cefotetan	0.001 g
Fosfomycin	0.005 g

• INTERPRETATION

Oxford Agar is a medium used for the isolation and cultivation of Listeria spp. from food, milk and dairy products. Columbia Agar Base provides peptones and other essential nutrients. Listeria spp. hydrolyzes esculin to esculetin which reacts with ferric ammonium citrate to produce black zones around the colonies. Lithium chloride, cycloheximide, colistin sulfate, acriflavin, cefotetan and fosfomycin are the selective agents to inhibit the growth of most Gram-negative and Gram-positive organisms except Listeria spp. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 24 - 48 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 green
Incubation conditions: 36 ± 1 °C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Listeria monocytogenes	15313	10^2-10^3	good	gray colonies/ black halo
Escherichia coli	25922	≥10^3	inhibited	-
Enterococcus faecalis	29212	≥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.

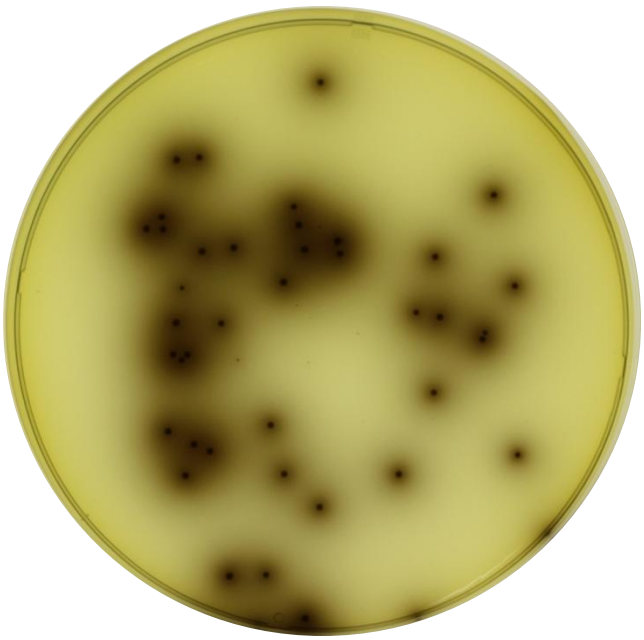
• REFERENCES

1. TIL - IDF (1988). Provisional of Recommended Method. Milk and Milk Products. Detection Listeria Monocytogenes.
2. ISO 10560: Milk and milk products- detection of Listeria monocytogenes. (1993).
3. Refer to the MFDS.

• PACKAGE

Cat. No : MB-O1310 Oxford Agar	500 G

• MICROBIAL CULTURE IMAGES



Listeria monocytogenes ATCC 15313

Incubation conditions : 36 ± 1℃ 24 - 48h

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