

Bacillus Cereus Agar (Pemba)



Medium used for the isolation and cultivation of *Bacillus cereus* in foodstuffs.

• CONTENTS (Liter)

Peptone	1.0 g
Mannitol	10.0 g
Sodium Chloride	2.0 g
Magnesium Sulfate	0.1 g
Disodium Phosphate	2.5 g
Monopotassium Phosphate	0.25 g
Sodium Pyruvate	10.0 g
Bromothymol Blue	0.12 g
Agar	15.0 g
Final pH = 7.2 ± 0.2 at 25°C	

• PROCEDURE

Suspend 40.97 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 Polymyxin B supplement (MB-P0816). Mix well. Pour into petri dishes.

Polymyxin B supplement

1 vial content (each vial is sufficient for 500 mL of medium)
Polymyxin B 50,000 IU

• INTERPRETATION

Bacillus Cereus Agar (Pemba) is a medium used for the isolation and cultivation of *Bacillus cereus* in foodstuffs. Peptone provides nitrogen, vitamins and nutrients. Mannitol provides the carbohydrate. Sodium chloride maintains the osmotic balance. Magnesium sulfate provides divalent cation and sulfate. Disodium phosphate and monopotassium phosphate are the buffering agents. Sodium pyruvate serves as oxygen scavengers. Bromothymol blue is the pH indicator. Agar is the solidifying agent. Polymyxin B makes the medium selective to isolate *Bacillus cereus*.

• 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: greenish beige

Prepared medium

Appearance: slightly opalescent

Color: yellowish green

Incubation conditions: 36 ± 1°C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Bacillus cereus</i>	11778	50-100	good	blue colonies
<i>Escherichia coli</i>	25922	≥10 ³	inhibited	-
<i>Pseudomonas aeruginosa</i>	27853	≥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. ICMSF (1978). Microorganisms in Foods. Toronto University Press. 274-275.
2. Holbrook, R., and J.M. Anderson, (1980). Can.J. Microbiol. 26, 753-759.
3. ISO 7932: 1993 Microbiology-General guidance for the enumeration of *Bacillus cereus*-Colony count technique at 30°C.

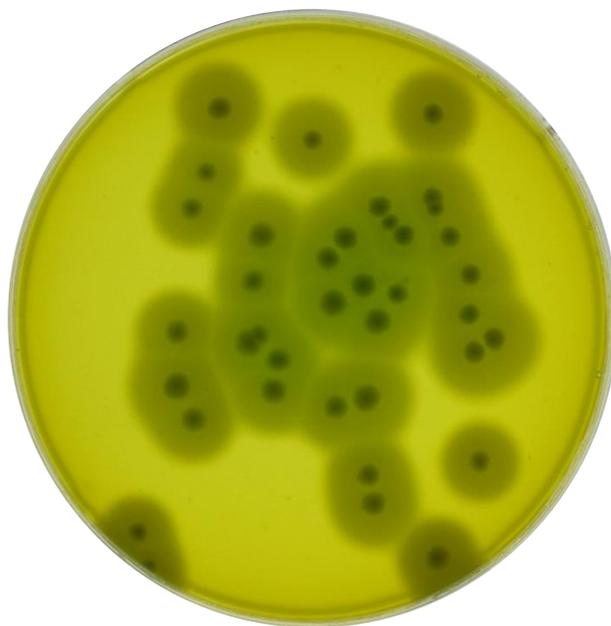
• PACKAGE

Cat. No : MB-B1136 Bacillus Cereus Agar (Pemba)	500 G
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• MICROBIAL CULTURE IMAGES



None



Bacillus cereus ATCC 11778 (100CFU)

Incubation conditions : 36 ± 1°C 48 hours