

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B1450</b>	<b>BACILLUS CEREUS AGAR BASE-MYP</b>		
<b>Formula</b>			
<b>Ingredients:</b>	<b>gms/lit.</b>		
Enzymatic digest of casein	10.00		
Beef extract	1.00		
D-Mannitol	10.00		
Sodium chloride	10.00		
Phenol red	0.025		
Agar	15.00		
Final pH (at 25°C) : 7.2 ± 0.2			
<b>Directions :</b>			
Suspend 46.03 grams in 900 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add rehydrated contents of 2 vials of sterile Polymyxin B Sulphate (BF005) solution and 100 ml sterile Egg Yolk Emulsion (BF003). Mix well and pour into sterile Petri plates.			
<b>Principle :</b>			
It contains enzymatic digest of casein and beef extract, which provide nitrogen source. Mannitol fermentation can be detected by phenol red, which yields yellow colour to the mannitol fermenting colonies due to acid production. Added egg yolk emulsion helps in differentiation of lecithinase producing colonies, which are surrounded by a zone of white precipitate. Added egg yolk emulsion helps in differentiation of lecithinase producing colonies, which are surrounded by a zone of white precipitate. Addition of Polymyxin B Sulphate (BF005) helps to restrict growth of gram-negative bacteria. These differentiating media allow differentiation of B.cereus from other Bacillus species by its inability to ferment mannitol and poor sporulation. Some strains of Bacillus cereus have very weak egg yolk reaction.			
<b>QC Tests - (I)Dehydrated Medium</b>			
Colour :	Light yellow to pinkish purple		
Appearance :	Homogeneous Free Flowing powder		
<b>(II)Rehydrated medium</b>			
pH (post autoclaving/heating) :	7.2 ± 0.2		
Colour (post autoclaving/heating) :	A) Basal medium: Red B) (After addition of 5% egg yolk emulsion): Light orange		
Clarity (post autoclaving/heating) :	A) Clear to slightly opalescent B) Opaque		
<b>(III)Q.C. Test Microbiological</b>			
Cultural characteristics observed with added Egg Yolk Emulsion (BF003) and Polymyxin B Sulphate (BF005) Cultural characteristics observed after 18-48 hrs at 30±2°C.			
MICROORGANISM (ATCC )	GROWTH	COLOUR OF COLONY	LECITHINASE ACTIVITY
Bacillus cereus (10876)	luxuriant	Red	positive, opaque zone around the colony
Bacillus subtilis (6633)	luxuriant	Yellow	Negative
Staphylococcus aureus (25923)	luxuriant	Yellow	positive, opaque zone around the colony
Escherichia coli (25922)	none-poor	-	-
Pseudomonas aeruginosa (27853)	none-poor	-	-
<b>Precautions :</b>	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.		
<b>Limitations :</b>	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.		
<b>Use :</b>	It is used for isolation and identification of Bacillus species and pathogenic Staphylococci. The composition and performance criteria of this medium are as per the specification laid down in ISO 7932:2004.		
<b>Storage :</b>	Dehydrated medium-below 30°C Prepared medium- Between 2 to 8°C.		
<b>Packing :</b>	500 gm. bottle		

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<b>Product profile:</b>	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B1450</b>	51.14 g/l	9.776 L	7.2 ± 0.2	Polymyxin B Selective Supplement (BF005) and 100 ml of sterile Egg Yolk emulsion (BF003)	121°C / 15 minutes