

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

B684		PHENYLALANINE MALONATE BROTH (Shaw & Clarke Medium)				
Formula						
Ingredients :		gms/lit.				
Yeast extract		1.00				
Sodium malonate		3.00				
DL-phenylalanine		2.00				
Ammonium sulphate		2.00				
Dipotassium phosphate		0.60				
Monopotassium phosphate		0.40				
Sodium chloride		2.00				
Bromo thymol blue		0.025				
Final pH (at 25°C) : 6.3 ± 0.2						
Directions :						
Suspend 11 gms. in 1000ml. distilled water. Heat to boiling to dissolve the medium completely. Dispense in tubes and sterilize by autoclaving at 10 lbs pressure (115°C) for 10 minutes.						
Principle :						
Yeast extract supplies nutrients to the organisms while two phosphates buffer the medium. Bromo thymol blue is the pH indicator. Sodium chloride maintains osmotic balance.						
QC Tests – (I) Dehydrated Medium						
Colour :		Light green				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.3 ± 0.2				
Colour (post autoclaving/heating) :		Yellowish green				
Clarity (post autoclaving/heating) :		Clear				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18 - 24 hrs at 35-37°C.						
MICROORGANISM (ATCC )		GROWTH	MALONATE	PHENYLALANINE		
Escherichia coli (25922)		Luxuriant	-	-		
Klebsiella pneumoniae (13883 )		Luxuriant	+	-		
Proteus mirabilis (25933)		Luxuriant	-	+		
Providencia alcalifaciens (9886)		Luxuriant	-	+		
Salmonella typhimurium (14028)		Luxuriant	-	-		
Salmonella arizonae (13314)		Luxuriant	+	-		
Key : Malonate + = dark blue colour of medium Phenylalanine + = dark green colour of medium						
Precautions :		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
Limitations :		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
Use :		For the differentiation of green – negative enteric bacteria on the basis of their ability to utilize malonate and produce pyruvic acid from phenylalanine.				
Storage :		Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.				
Packing :		500 gm. bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B684		11g/l	45.454L	6.3 ± 0.2	NIL	115°C / 10 minutes