

**BIOMARK Laboratories – INDIA**

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**TECHNICAL SHEET**

<b>B237</b>	<b>Mac Conkey Agar w/o CV, NaCl w/ 0.5% Bile Salts</b>	
<b>Formula</b>		
<b>Ingredients :</b>	<b>gms/lit.</b>	
Peptic digest of animal tissue	20.00	
Lactose	10.00	
Bile Salts	5.00	
Neutral red	0.075	
Agar	12.00	
Final pH (at 25°C) : 7.4± 0.2		
<b>Directions :</b>		
Suspend 47.07 grams of medium in 1000 ml distilled water. Heat to boiling with gentle swirling to dissolve the agar completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Avoid overheating. Cool to 45 - 50°C and pour into sterile Petri plates. The surface of the medium should be dry when inoculated. Note: For the cultivation of vibrio species, add 5 grams per litre of sodium chloride before sterilization.		
<b>Principle:</b> Peptic digest of animal tissue is sources of nitrogen and other nutrients. Lactose is a fermentable carbohydrate. When lactose is fermented, a local pH drop around the colony causes a colour change in the pH indicator (neutral red). Bile salts is selective agents that inhibit growth of gram –positive organisms. Agar is a solidifying agent.		
<b>QC Tests – (I)Dehydrated Medium</b>		
Colour :	Pinkish beige	
Appearance :	Homogeneous Free Flowing powder	
<b>(II)Rehydrated medium</b>		
pH (post autoclaving/heating) :	7.4 ± 0.2	
Colour (post autoclaving/heating) :	Orange red	
Clarity (post autoclaving/heating) :	Clear to slightly opalescent	
<b>(III) Q.C. Test Microbiological</b>		
Cultural characteristics observed after 18 – 24 hours at 35- 37°C.		
MICROORGANISM (ATCC )	GROWTH	COLOUR OF COLONY
Enterobacter aerogenes (13048)	Luxuriant	Pink to red
Escherichia coli (25922)	Luxuriant	Pink to red with bile precipitate
Proteus vulgaris (13315 )	Luxuriant	Colourless
Salmonella enteritidis (13076 )	Luxuriant	Colourless
Salmonella typhi ( 6539 )	Luxuriant	Colourless
Salmonella paratyphi A	Luxuriant	Colourless
Salmonella paratyphi B	Luxuriant	Colourless
Shigella flexneri (12022)	Fair to good	Colourless
Enterococcus faecalis (29212)	Fair to good	Pale pink to red
Staphylococcus aureus (25923)	Fair to good	Pale pink to red
<b>Precautions :</b>	1. For Laboratory Use.	
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.	

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<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.				
	2. Although MacConkey media are selective primarily for gram – negative enteric bacilli, biochemical and, if indicated, serological testing using pure cultures are recommended for complete identification. Consult appropriate references for further information.				
	3. Incubation of MacConkey Agar plates under increased CO <sub>2</sub> has been reported to reduce the growth and recovery of a number of strains of gram – negative bacilli.				
<b>Use :</b>	For cultivation and differentiation of enteric bacteria, restricting swarming of Proteus species from specimens like urine which may contain large number of Proteus species as well as potentially pathogenic gram-positive organisms.				
<b>Storage :</b>	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
<b>Packing :</b>	500 gm. bottle				
<b>Product profile:</b>	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
	<b>B237</b>	47.07g/L	10.622L	7.4± 0.2	NIL