

**BIOMARK Laboratories – INDIA**

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**TECHNICAL SHEET**

<b>B240</b>	<b>Mac Conkey Agar w/o CV, w/Bile Salt (0.15%)</b>	
<b>Formula</b>		
<b>Ingredients :</b>	<b>gms/lit.</b>	
Peptone	17.00	
Proteose peptone	3.00	
Lactose	10.00	
Bile Salts	1.50	
Sodium chloride	5.00	
Neutral red	0.03	
Agar	15.00	
Final pH (at 25°C) : 7.1± 0.2		
<b>Directions :</b>		
Suspend 51.53 gms 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. Mix well and pour into sterile Petri plates. The surface of the medium should be dry when inoculated.		
<b>Principle:</b> Peptone and proteose peptone serves as a source of carbon, nitrogen, long chain amino acids and other essential growth nutrients. The selective action of this medium is attributed to bile salts, which is inhibitory to most species of gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as red or pink colonies. The red colour is due to production of acid from lactose, absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6.8. Lactose non-fermenting strains, such as Shigella and Salmonella are colourless and transparent and typically do not alter appearance of the medium.		
<b>QC Tests – (I) Dehydrated Medium</b>		
Colour :	Pinkish beige	
Appearance :	Homogeneous Free Flowing powder	
<b>(II) Rehydrated medium</b>		
pH (post autoclaving/heating) :	7.1 ± 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)	Luxuriant	Colourless
Enterococcus faecalis (29212)	None-poor	Pale pink to red
Staphylococcus aureus (25923)	Inhibited	--
Staphylococcus epidermidis (12228)	Inhibited	--
<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. It is advised to incubate for recommended period and temperature to avoid misinterpretation of results.				
<b>Use :</b>	For selective isolation and differentiation of lactose fermenting and lactose non fermenting enteric bacteria.				
<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>B240</b>	51.53 g/L	9.703L	7.1± 0.2	NIL	121°C /15 min.