

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B1222</b>	<b>MAC CONKEY AGAR MEDIUM</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				
Sodium chloride	5.00				
Neutral red	0.07				
Agar	15.30				
Final pH (at 25°C) : 7.4 ± 0.2					
<b>Directions :</b>					
Suspend 55.37 grams 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.					
<b>Principle :</b>					
Peptic digest of animal tissue provides amino acid and other growth factors. Lactose fermenting strains grow as red or pink and may be surrounded by a zone of acid precipitated bile. 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) :	7.4 ± 0.2				
Colour (post autoclaving/heating) :	Orange Reddish				
Clarity (post autoclaving/heating) :	Clear				
<b>(III) Q.C. Test Microbiological</b>					
Cultural characteristics observed after 18 – 24 hours at 35-37°C.					
MICROORGANISM (ATCC )	GROWTH	COLONY COLOR			
Enterobacter aerogenes (13048)	Luxuriant	Pink to red			
Escherichia coli (25922)	Luxuriant	Pink to red w/ bile ppt			
Proteus vulgaris (13315)	Luxuriant	Colourless			
Salmonella Typhi (6539)	Luxuriant	Colourless			
Salmonella Enteritidis (13076)	Luxuriant	Colourless			
Shigella flexneri (12022)	Luxuriant	Colourless			
Staphylococcus aureus (25923)	Inhibited	--			
Enterococcus faecalis (29212)	fair to good	pale pink to red			
Salmonella Paratyphi A (9150)	Luxuriant	Colourless			
Salmonella Paratyphi B (8759)	Luxuriant	Colourless			
<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>	For isolation and differentiation of lactose fermenting and lactose non-fermenting enteric bacteria and also for isolation of faecal streptococci.				
<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>B1222</b>	55.37g/l	9.03L	7.4 ± 0.2	Nil	121°C / 15 minutes