

**BIOMARK Laboratories – INDIA**

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**TECHNICAL SHEET**

<b>B245</b>	<b>Mac Conkey Broth Purple</b>		
<b>Formula</b>			
<b>Ingredients :</b>	<b>gms/lit.</b>		
Peptone	20.00		
Lactose	10.00		
Sodium taurocholate	5.00		
Sodium Chloride	5.00		
Bromo cresol purple	0.01		
Final pH (at 25°C) : 7.4± 0.2			
<b>Directions :</b>			
Suspend 40.01 grams in 1000 ml distilled water. Heat if necessary, to dissolve the medium and distribute into test tubes with inverted Durham tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.			
<b>Principle:</b> Peptone provides nitrogenous and carbonaceous compounds, long chain amino acids and other essential growth nutrients. Lactose is the fermentable carbohydrate. Sodium taurocholate inhibits gram-positive organisms. Sodium chloride maintains the osmotic balance of the medium. Bromocresol purple is the pH indicator in the medium which turns yellow under acidic condition. Lactose fermentation turn the medium yellow due to the acidity produced on lactose fermentation. The colour change of the dye is observed when the pH of the medium falls below 6.8. Lactose non-fermenting organisms like Salmonella and Shigella do not alter the appearance of the medium.			
<b>QC Tests – (I) Dehydrated Medium</b>			
Colour :	Purplish cream to yellow		
Appearance :	Homogeneous Free Flowing powder		
<b>(II) Rehydrated medium</b>			
pH (post autoclaving/heating) :	7.4 ± 0.2		
Colour (post autoclaving/heating) :	Purple		
Clarity (post autoclaving/heating) :	Clear to slightly opalescent solution in tubes		
<b>(III) Q.C. Test Microbiological</b>			
Cultural characteristics observed after 18 – 24 hours at 35- 37°C.			
MICROORGANISM (ATCC )	GROWTH	ACID	GAS
Enterobacter aerogenes (13048)	Luxuriant	+ (yellow colour)	+
Escherichia coli (25922)	Luxuriant	+ (yellow colour)	+
Salmonella cholerasuis (12011)	Fair to good	--	--
Staphylococcus aureus (25923)	Inhibited	--	--
Escherichia coli (8739)	Luxuriant	+ (yellow colour)	+
Escherichia coli (NCTC 9002)	Luxuriant	+ (yellow colour)	+
Staphylococcus aureus (6538)	Inhibited	--	--
<b>Precautions :</b>	<ol style="list-style-type: none"> <li>1. For Laboratory Use.</li> <li>2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.</li> </ol>		

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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.				
<b>Use:</b>	For presumptive identification of coliforms from a variety of specimens such as water, milk and foods.				
<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>B245</b>	40.01 g/L	12.496 L	7.4± 0.2	NIL	121°C /15 min.