

BIOMARK Laboratories – INDIA

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TECHNICAL SHEET

B753	Sorbitol Agar (Sorbitol MacConkey Agar)		
Formula			
Ingredients :		gms/lit.	
Peptone		17.00	
Proteose peptone		3.00	
D-Sorbitol		10.00	
Bile salts mixture		1.50	
Sodium chloride		5.00	
Crystal violet		0.001	
Neutral red		0.03	
Agar		13.5	
Final pH (at 25°C) : 7.1± 0.2			
Directions :			
Suspend 50.03 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium 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.			
Principle: Peptone and proteose peptone is sources of nitrogen and other nutrients. Sorbitol is a fermentable carbohydrate. When Sorbitol is fermented, a local pH drop around the colony causes a colour change in the pH indicator (neutral red). Crystal violet and Bile salt is selective agents that inhibit growth of gram –positive organisms. Agar is a solidifying agent.			
QC Tests – (I)Dehydrated Medium			
Colour :		Pinkish beige	
Appearance :		Homogeneous Free Flowing powder	
(II)Rehydrated medium			
pH (post autoclaving/heating) :		7.1 ± 0.2	
Colour (post autoclaving/heating) :		Red with purplish tinge	
Clarity (post autoclaving/heating) :		Clear to slightly opalescent	
(III) Q.C. Test Microbiological			
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.			
MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	
Escherichia coli (25922)	Luxuriant	Pink to red with bile precipitate	
Salmonella typhi (6539)	Luxuriant	Pink	
Shigella flexneri (12022)	Luxuriant	Colourless	
Escherichia coli serotype O11 and O55	Luxuriant	Colourless	
Escherichia coli O157:H7 (NCTC29900)	Luxuriant	Colourless	
Precautions :	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.		

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Limitations :	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. MacConkey Sorbitol Agar however should not be solely used to detect pathogenic E.coli O157: H7 strains as some nontoxic strains will also not ferment sorbitol.				
Use :	For isolation and identification of enteropathogenic Escherichia coli strains associated with infant diarrhea.				
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
	B753	50.03 g/L	9.99L	7.1± 0.2	NIL