BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B641	**PHENOL RED TARTARATEAGAR**		
Formula			
Ingredients :		**gms/lit.**	
Peptic digest of animal tissue		10.00	
Sodium potassium tartrate		10.00	
Sodium chloride		5.00	
Phenol red		0.024	
Agar		15.00	
Final pH (at 25°C) : 7.6± 0.2			
Directions :			
Suspend 40.02 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to cool in an upright position.			
Principle :			
Peptic digest of animal tissue in the medium provide the essential growth nutrients like nitrogenous compounds to the organisms. Sodium potassium tartrate is used most frequently because it is easy to be utilized by the organism. Tartrate utilization (fermentation) yields an acidic reaction, which is indicated by the yellow colour formation at the bottom of the tube. Phenol red acts as the pH indicator while sodium chloride maintains the osmotic balance of the medium.			
QC Tests – (I)Dehydrated Medium			
	Colour :	Light yellow to pink	
	Appearance :	Homogeneous Free Flowing powder	
(II)Rehydrated medium			
	pH (post autoclaving/heating) :	7.6 ± 0.2	
	Colour (post autoclaving/heating) :	Red to orange red	
	Clarity (post autoclaving/heating) :	Clear to slightly opalescentgel forms in tubes as butts	
(III)Q.C. Test Microbiological			
	Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours (may be upto 72 hours)		
	MICROORGANISM (ATCC)	GROWTH	REACTION
	Escherichia coli (25922)	Luxuriant	positive reaction, yellow colour in the lower portion of the tube
	Salmonellas Schottmuelleri(10719)	Luxuriant	negative reaction
	Salmonella typhimurium (14028)	Luxuriant	Acid Production, + positive reaction, yellow colour
	Salmonella Typhi (6539)	Luxuriant	positive reaction, yellow colour in the lower portion of the
	Proteus vulgaris (13315)	Luxuriant	positive reaction, yellow colour in the lower portion of the
	Klebsiella pneumoniae (13883)	Luxuriant	positive reaction, yellow colour in the lower portion of the
	Salmonella Paratyphi A (9150)	Luxuriant	negative reaction
	Salmonella Paratyphi B (8739)	Luxuriant	negative reaction
	Vibrio parahaemolyticus (17802)	Luxuriant	positive reaction, yellow colour in the lower portion of the tube
Precautions :	1. For Laboratory Use.		
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.		
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. The addition of some carbohydrates to the basal medium may cause an acid reaction. To restore the original pH (and colour of the medium), add 0.1 N sodium hydroxide on a drop – by – drop basis. Take care not to make the medium too alkaline, which would prevent fermentation from occurring within the usual incubation period.		
	3. When inoculating tubes, stab gently and do not use a loop. Rough stabbing or using a loop to stab may give the false appearance of gas production when mechanical splitting		

Refer disclaimer Overleaf

	of the medium is what actually occurred.				
Use :	It is recommended for identification and differentiation of Salmonella species on the basis of tartrate utilization				
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
B641	40.02 g/l	12.49 L	7.6± 0.2	Nil	121^0C / 15 minutes