BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1077	**KF STREPTOCOCCAL AGAR BASE**
Formula	
Ingredients :	**gms/lit.**
Peptone ,special	10.00
Yeast extract	10.00
Sodium chloride	5.00
Sodium glycerophosphate	10.00
Maltose	20.00
Lactose	1.00
Sodium azide	0.40
Agar	20.00
Final pH (at 25°C) : 7.2 ± 0.2	
Directions :	
Suspend 76.4 grams in 1000 ml distilled water. Add rehydrated contents of 1 vial of Bromo Cresol Purple (BF067). Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Overheating will lower the pH and render the medium less productive. Cool to 50°C and aseptically add 10 ml of 1% 2, 3, 5-Triphenyl Tetrazolium Chloride (TTC) (BF044). Mix well and pour into sterile Petri plates.	
Principle :	
Special peptone with yeast extract provides nitrogen, carbon, sulphur, amino acids, vitamins and trace ingredients to the faecal Streptococci. Lactose and maltose are the fermentable carbohydrates and therefore serve as energy sources. Sodium azide is a selective agent, which hampers the growth of gram-negative bacteria. 2,3,5-Triphenyl Tetrazolium Chloride is reduced to insoluble formazan by actively metabolizing cells, resulting in the formation of pink or red colonies.	

QC Tests – (I)Dehydrated Medium	
Colour :	Cream to light yellow
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	7.2 ± 0.2
Colour (post autoclaving/heating) :	Basal medium : Light yellow. After addition of BF067 (Bromo Cresol Purple) : Light purple
Clarity (post autoclaving/heating) :	Clear to slightly opalescent
(III)Q.C. Test Microbiological	

Cultural characteristics observed with added BF067 and BF044, after an incubation at 35-37°C for 48-72 hours.

MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	
Enterococcus faecalis (29212)	Good-luxuriant	Red-maroon	
Enterobacter aerogenes (13048)	Inhibited	--	
Escherichia coli (25922)	Inhibited	--	

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
	3. Sodium azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables .
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. Many strains of S. bovis and S. equinus are inhibited by azide.
Use :	For selective isolation and enumeration of faecal Streptococci in surface water by direct plating or by membrane filter method.
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
B1077	76.4 g/l	6.54L	7.2 ± 0.2	1% Triphenyl Tetrazolium chloride (BF044)& Bromo Cresol Purple(BF067)	121^{0}C / 15 minutes