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TECHNICAL SHEET

B771 TERGITOL	7 AGAR BASE	
Formula		
Ingredients:	gms/lit.	
Proteose peptone	5.00	
Yeast extract	3.00	
Lactose	10.00	
Sodium heptadecyl sulphate ((Tergitol 7) 0.10	
Bromo thymol blue	0.025	
Agar	15.00	
Final pH (at 25°C): 6.9 <u>-</u>	<u>+</u> 0.2	
Directions :		

Suspend 33.12 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. Cool to 45-50°C. Aseptically add 3 ml of Triphenyl Tetrazolium Chloride (TTC) Solution (BF044), if desired. Mix well and pour into sterile Petri plates.

Principle:

Tergitol 7 (sodium heptadecyl sulfate) inhibits growth of gram – positive microorganisms and spore – forming gram – negative microorganisms, as well as the swarming of proteus, while allowing for superior recovery of coliforms. Lactose fermentation is indicated by a colour change of the pH indicator, bromo thymol blue. Lactose – fermenting microorganisms produce yellow colonies. E. coli produces yellow colonies with yellow zones, while Enterobacter and Klebsiella colonies are greenish – yellow. Nonfermenting organisms, such as Salmonella and Shigella, produce colonies surrounded by blue zones.

When TTC is added to the medium, it serves as an indicator of bacterial growth. TTC Is rapidly reduced to insoluble red formazan by most growth. TTC is rapidly reduced in bacterial cell to insoluble red formazan by most lactose – fermenting organisms except E. Coli. Enterobacter and Klebsiella species. In the presence of TTC, lactose fermenters, which includes the coliforms, produce greenish – yellow colonies with yellow zones, while lactose non-fermenters produce red colonies surrounded by blue zones.

Proteose peptone provides the carbon and nitrogen sources required for good growth of a wide variety of organisms. Vitamins and cofactors required for growth, as well as additional sources of nitrogen and carbon, are provided by yeast extract. The Agar incorporated into Tergitol 7 Agar serves as a solidifying agent.

serves as a son	ullyllig agent.					
QC Tests - (I)D	ehydrated Medium					
Colour:	Colour:			Cream to light green		
Appearance :			Homogeneous Free Flowing powder			
(II)Rehydrated medium						
pH (post auto	pH (post autoclaving/heating) :			6.9 ± 0.2		
Colour (post autoclaving/heating):			Green			
Clarity (post autoclaving/heating):			Clear to slightly opalescent			
(III)Q.C. Test	(III)Q.C. Test Microbiological					
Cultural cha	Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours with added TTO					
Solution 1%	(BF044).					
MICROORGAN	MICROORGANISM (ATCC)		WTH	COLOUR OF COLONY / MEDIUM		
Enterobacter aerogenes (13048)		Luxuriant		Reddish brown		
Escherichia coli (25922)		Good-luxuriant		Yellow with red centre		
Proteus mira	Proteus mirabilis (25933)			Red with bluish zone		
Pseudomonas aeruginosa (27853)		Good		Red with bluish zone		
Salmonella t	Salmonella typhimurium (14028)		iant	Red with bluish zone		
Shigella flexneri (12022)		Luxuriant		Red with bluish zone		
Staphylococcus aureus (25923)		Inhibited				
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. Since the medium with TTC permits growth of coliform organisms, this fact								
	must be taken into consideration in the isolation of Candida from specimens.								
	3. Pour plates do not give satisfactory results.								
	4. Allow plates to dry with lids slightly ajar for 1-2 hours after dispensing.								
	5. Reduction of TTC is an irreversible reaction that produces an insoluble								
	formazan compound.								
Use:	For selective enumeration and identification of coliform organisms.								
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.								
Packing:	500 gm. bottle								
Product profile:	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization				
		Preparation (500g)							
B771	33.12 g/l	15.09L	6.9 ± 0.2	1% 2,3,5,	121°C /15 min.				
				Triphenyl					
				Tetrazolium					
				Chloride (TTC)					
				solution					
				(BF044), if					
				desired.					

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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