

TECHNICAL SHEET

B771	TERGITOL-7 AGAR		
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 ± 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.			
QC Tests - (I) Dehydrated Medium			
Colour :		Cream to light green	
Appearance :		Homogeneous Free Flowing powder	
(II) Rehydrated medium			
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 Microbiological			
Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours with added TTC Solution 1% (BF044).			
MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY / MEDIUM	
Enterobacter aerogenes (13048)	Luxuriant	Reddish brown	
Escherichia coli (25922)	Good-luxuriant	Yellow with red centre	
Proteus mirabilis (25933)	Good	Red with bluish zone	
Pseudomonas aeruginosa (27853)	Good	Red with bluish zone	
Salmonella typhimurium (14028)	Luxuriant	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 Preparation (500g)	pH (25°C)	Supplement	Sterilization
B771	33.12 g/l	15.09L	6.9 ± 0.2	1% 2, 3, 5, Triphenyl Tetrazolium Chloride (TTC) solution (BF044), if desired.	121°C /15 min.