

TECHNICAL SHEET

B264	MUELLER KAUFFMAN TETRATHIONATE BROTH BASE	
Formula		
Ingredients :	gms/lit.	
Casein enzymic hydrolysate	7.00	
Papaic digest of soyabean meal	2.30	
Sodium chloride	2.30	
Calcium carbonate	25.00	
Sodium thiosulphate	40.70	
Ox bile	4.75	
Final pH (at 25°C) : Self		
Directions :		
Suspend 82.05 grams in 1000 ml distilled water. Heat the medium just to boiling. DO NOT AUTOCLAVE. Cool and just before use aseptically add 19 ml of iodine solution (20 g iodine and 25 g potassium iodide in 100 ml sterile distilled water) and 9.5 ml of 0.1% brilliant green solution. Mix well to disperse calcium carbonate uniformly before dispensing in sterile tubes.		
Note: Due to presence of calcium carbonate, the prepared media forms opalescent solution with white precipitate		
Principle :		
Casein enzymic hydrolysate and papaic digest of soyabean meal as sources of carbon, nitrogen, vitamins and minerals. Ox bile and added brilliant green are selective agents, which inhibit gram-positive and other gram-negative organisms. Calcium carbonate is the buffer. Sodium chloride maintains osmotic equilibrium. Sodium thiosulphate is a source of sulfur. If desired 4mg of Novobiocin per litre of broth can be added to suppress Proteus species.		
QC Tests – (I) Dehydrated Medium		
Colour :	Cream to yellow	
Appearance :	Homogeneous Free Flowing powder	
(II) Rehydrated medium		
PH (post autoclaving/heating) :	Self	
Colour (post autoclaving/heating) :	With added brilliant green & iodine solution, light green	
Clarity (post autoclaving/heating) :	Opalescent	
(III) Q.C. Test Microbiological		
Cultural characteristics observed after 18-48 hrs.at 43°C.		
MICROORGANISM (ATCC)	RECOVERY	
Salmonella typhimurium (14028)	Excellent	
Salmonella enteritidis (13076)	Excellent	
Salmonella paratyphi A	Excellent	
Salmonella paratyphi B	Excellent	
Escherichia coli (25922)	Little -none	
Proteus vulgaris (13315)	Little -none	
Salmonella typhi (6539)	Inhibited	
Shigella flexneri (12022)	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. The complete medium is unstable and should be used immediately. It may be stored at 2-8 °C in the dark for no more than seven days.				
	3. Due to the nutritional requirements and inhibitory characteristics of the organisms themselves, organisms other than salmonellae, such as Morganella morganii and some Enterobacteriaceae may grow in the medium.				
	3. Confirmatory tests, such as fermentation reactions and seroagglutination should be carried out on all presumptive Salmonella colonies that are recovered.				
Use :	For improved enrichment and isolation of Salmonellae.				
Storage :	Dehydrated medium- below 30°C Prepared medium- Use freshly prepared medium.				
Packing :	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B264	82.05 g/l	6.093 L	Self	Iodine solution (20g iodine and 25g potassium iodide and 0.1% brilliant green solution.	DO NOT AUTOCLAVE