

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B1403</b>	<b>MULLER KAUFFMAN TETRATHIONATE BROTH BASE</b>					
<b>Formula</b>						
<b>Ingredients:</b>			<b>gms/lit.</b>			
Peptic digest of animal tissue			4.30			
Casein enzymic hydrolysate			8.60			
Ox Bile			4.75			
Sodium chloride			2.60			
Calcium carbonate			38.70			
Sodium thiosulphate, pentahydrate			47.80			
Brilliant green			0.0095			
Final pH (at 25°C): 8.2 ± 0.2						
<b>Directions :</b>						
Suspend 89.42 grams of dehydrated medium in 1000 ml distilled water. Heat the medium just to boiling. DO NOT AUTOCLAVE. Cool to 45-50°C and just before use aseptically add 20 ml of iodine solution (20 gram iodine and 25 gram potassium iodide in 100 ml sterile distilled water) along with rehydrated contents of 1 vial of MKTT Novobiocin Supplement (BF141). Mix well to disperse calcium carbonate uniformly before dispensing in sterile tubes.						
<b>Principle :</b>						
Casein enzymic hydrolysate and peptic digest of animal tissue 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.						
<b>QC Tests – (I)Dehydrated Medium</b>						
Colour :		Cream to greenish yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II)Rehydrated medium</b>						
pH (post autoclaving/heating) :		8.2 ± 0.2				
Colour (post autoclaving/heating) :		Pale green				
Clarity (post autoclaving/heating) :		Opaque solution with heavy white precipitate				
<b>(III)Q.C. Test Microbiological</b>						
Cultural characteristics observed after an incubation at 43°C for 18-48 hours with added 20ml iodine solution and MKTT Novobiocin Supplement (BF141), when subcultured on Soyabean Casein Digest Agar (B039).						
MICROORGANISM (ATCC )		RECOVERY				
Salmonella typhimurium (14028)		Excellent				
Salmonella Enteritidis (13076)		Excellent				
Salmonella Paratyphi A (9150)		Excellent				
Salmonella Paratyphi B (8759)		Excellent				
Salmonella Typhi (6539)		Inhibited				
Escherichia coli (25922)		none-poor				
Proteus vulgaris (13315)		none-poor				
Shigella flexneri (12022)		Inhibited				
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
<b>Use :</b>		For improved enrichment and isolation of Salmonellae. Recommended by ISO 6579:2002.				
<b>Storage :</b>		Dehydrated medium- below 30°C Prepared medium – at 2-8°C				
<b>Packing :</b>		500 gm. bottle				
<b>Product profile:</b>		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B1403</b>	89.42 g/l	5.59 L	8.2 ± 0.2	MKTT Novobiocin Supplement (BF141)	DO NOT AUTOCLAVE	

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