

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B837		MUG LAURYL SULPHATE BROTH			
Formula					
Ingredients :		gms/lit.			
Casein enzymic hydrolysate		20.00			
Lactose		5.00			
Sodium chloride		5.00			
Dipotassium phosphate		2.75			
Monopotassium phosphate		2.75			
Sodium lauryl sulphate		00.10			
4-Methylumbelliferyl -D- glucuronide (MUG)		0.05			
Final pH (at 25°C) : 6.8 ± 0.2					
Directions :					
Suspend 35.65 gms. in 1000 ml. distilled water. Heat to dissolve the medium completely. Dispense into tubes with inverted Durham's tubes. Sterilize By autoclaving at 15 lbs pressure (121°C) for 15 minutes.					
Principle :					
Casein enzymic hydrolysate provides nutrients while lactose act as energy sources. Sodium lauryl sulphate inhibits many organisms other than coliforms. 4-methylumbellifery -D- glucuronide is hydrolyzed by an enzyme -glucuronidase possessed by organisms to yield 4-methylumbelliferone, a fluorescent end product.					
QC Tests – (I) Dehydrated Medium					
Colour :		Cream to light yellow			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		6.8 ± 0.2			
Colour (post autoclaving/heating) :		Light amber			
Clarity (post autoclaving/heating) :		Clear			
(III) Q.C. Test Microbiological					
Cultural characteristics observed after 4 –24 hrs.at 35-37°C.					
MICROORGANISM (ATCC)		GROWTH		FLUORESCENCE	
Escherichia coli (25922)		Luxuriant		+	
Enterobacter aerogenes (13048)		Luxuriant		-	
Key : + = fluorescence under UV light					
Precautions :					
1. For Laboratory Use.					
2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.					
Limitations :					
1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.					
Use :					
For detection of coliform orgnisms in water and food specimens by a fluorogenic procedure.					
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			
B837	35.65g/l	14.025L	6.8 ± 0.2	NIL	121°C / 15 minutes