

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B837I	MUG LAURYL SULPHATE BROTH, MODIFIED				
Formula					
Ingredients :		gms/lit.			
Casein enzymic hydrolysate		20.00			
Lactose		5.00			
Dipotassium hydrogen phosphate		2.75			
Monopotassium phosphate		2.75			
Sodium chloride		5.00			
4-Methylumbelliferyl β-D-glucuronide (MUG)		0.10			
Sodium lauryl sulphate		0.10			
Tryptophan		1.00			
Final pH (at 25°C) : 6.8 ± 0.2					
Directions :					
Suspend 36.7 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense into tubes with inverted Durham's tubes as required. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.					
Principle :					
Casein enzymic hydrolysate provides nutrients while lactose acts as energy source. Sodium lauryl sulphate inhibits many organisms other than coliforms. 4-methylumbelliferyl- beta -D-glucuronide is hydrolyzed by the enzyme beta-glucuronidase to yield 4-methylumbelliferone, a fluorescent end product.					
QC Tests – (I) Dehydrated Medium					
	Colour :	Cream to 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 an incubation at 30°C for 24 hours					
	MICROORGANISM (ATCC)	GROWTH	FLUORESCENCE	INDOLE PRODUCTION	
	Escherichia coli (25922)	Luxuriant	+	POSITIVE REACTION,	
	Enterobacter aerogenes (13048)	Luxuriant	-	NEGATIVE REACTION	
	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 :	It is used as a selective enrichment medium for enumeration of presumptive Escherichia coli and other coliforms from milk and milk products.				
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
B837I	36.7 g/l	13.623 L	6.8 ± 0.2	NIL	121°C / 15 minutes