

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B602		MUG EC BROTH			
Formula					
Ingredients :		gms/lit.			
Casein enzymic hydrolysate		20.00			
Lactose		5.00			
Bile salts mixture		1.50			
Dipotassium phosphate		4.00			
Monopotassium phosphate		1.50			
Sodium chloride		5.00			
4-Methylumbelliferyl -D-Glucuronide (MUG)		0.05			
Final pH (at 25°C) : 6.9 ± 0.2					
Directions :					
Suspend 37 gms. in 1000ml distilled water. Dispense in tubes containing inverted Durham's tubes. Sterilize by autoclaving at 15lbs pressure (121°C) for 12- 15 minutes.					
Principle :					
Casein enzymic hydrolysate provides essential nutrients. Lactose is the fermentable carbohydrate. Sodium chloride maintains osmotic equilibrium. The medium has a strong buffering system to control the pH in the presence of fermentative action. The bile salts inhibit gram –positive bacteria especially Bacillus species and faecal Streptococci. Mostly –glucuronidase activity occurs within 4 hours but some weakly –glucuronidase- positive strains require overnight incubation.					
QC Tests – (I) Dehydrated Medium					
Colour :		Yellow			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		6.9 ± 0.2			
Colour (post autoclaving/heating) :		Yellow			
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		+ (throughout the tube)	
Enterobacter aerogenes (13048)		Luxuriant		-	
Salmonella typhi (6539)		Good		-	
Shigella flexneri (12022)		Good		-	
Key : + = fluorescence at 366 nm					
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 the detection of E.coli in water and food samples 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	
B602		37g/l		13.513L	
6.9 ± 0.2		NIL		121°C / 15 minutes	