

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1220	MUG MFC AGAR				
Formula					
Ingredients:		gms/lit.			
Tryptose		10.00			
Proteose peptone		5.00			
Yeast extract		3.00			
Bile salts		1.50			
Sodium chloride		5.00			
4-Methylumbelliferyl β-D-Glucuronide (MUG)		0.10			
Agar		15.00			
Final pH (at 25°C) : 7.4 ± 0.2					
Directions :					
Suspend 39.6 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Mix well and pour into sterile Petri plates.					
Principle :					
Tryptose and proteose peptone provide carbon, nitrogen, vitamins and minerals necessary for the growth of faecal coliforms. Yeast extract provides B-complex vitamins, which stimulate bacterial growth. Bile salts inhibit the growth of gram-positive microorganisms. Incorporation of MUG in the medium permits rapid detection of E. coli, when the medium is observed for fluorescence under long-wave UV light.					
QC Tests - (I) Dehydrated Medium					
Colour :		Cream to yellow			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		7.4 ± 0.2			
Colour (post autoclaving/heating) :		yellow			
Clarity (post autoclaving/heating) :		clear to slightly opalescent gel			
(III) Q.C. Test Microbiological					
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours					
MICROORGANISM (ATCC)	GROWTH	FLUORESCENCE (UNDER UV)*			
Escherichia coli (25922)	luxuriant	positive			
Enterococcus faecalis (29212)	inhibited	--			
SalmonellaTyphimurium (14028)	luxuriant	negative			
Shigella flexneri (12022)	luxuriant	negative			
* - Fluorescence can be visualized on addition of NaOH solution or exposure to ammonia fumes.					
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 recommended for cultivation and enumeration of faecal coliforms by the membrane filter technique at elevated temperature.				
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
B1220	39.60 g/l	12.626 L	7.4 ± 0.2	NIL	DO NOT AUTOCLAVE.

Disclaimer:

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