

TECHNICAL SHEET

B1210	LEIFSON AGAR				
Formula					
Ingredients :			gms/lit.		
Meat extract			5.00		
Meat peptone			5.00		
Lactose			10.00		
Sodium thiosulphate			5.40		
Sodium citrate			6.00		
Ferric citrate			1.00		
Sodium deoxycholate			3.00		
Neutral red			0.02		
Agar			12.00		
Final pH (at 25°C) : 7.5 ± 0.2					
Directions :					
Suspend 47.42 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE OR OVERHEAT. Excessive heating is detrimental. Cool to 45-50°C. Mix well and pour into sterile Petri plates.					
Principle :					
Meat extract and meat peptone provide essential growth nutrients. Sodium deoxycholate inhibit all gram-positive bacteria. Lactose is added to the medium to allow differentiation of lactose fermenting bacteria such as Escherichia coli from nonlactose fermenting species such as Salmonella and Shigella species. Lactose fermenting strains grow as red to pink colonies because of absorption of neutral red indicator. Sodium thiosulphate and ferric citrate forms the H ₂ S indicator system. Non-fermenting species grow as colourless colonies with black centres due to production of H ₂ S against Shigella which does not produce H ₂ S					
QC Tests - (I) Dehydrated Medium					
Colour :		Light yellow to pink			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		7.5 ± 0.2			
Colour (post autoclaving/heating) :		Reddish orange			
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	COLOUR OF COLONY	H ₂ S		
Escherichia coli (25922)	poor	pink w/bile precipitate	negative reaction		
Enterococcus faecalis (29212)	inhibited	---	--		
Salmonella Enteritidis(13076)	good-luxuriant	colourless	positive reaction, black centred colonies		
Shigella flexneri (12022)	good	colourless	negative reaction		
Salmonella Typhimurium (14028)	luxuriant	colourless	positive reaction, black centred colonies		
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 isolation of Salmonella and Shigella species				
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
B1210	47.42 g/l	10.54 lit	7.5 ± 0.2	Nil	DO NOT AUTOCLAVE

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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