

TECHNICAL SHEET

B179	EMB AGAR BASE					
Formula						
Ingredients :		Gms/lit.				
Peptone		10.00				
Dipotassium phosphate		2.00				
Eosin - Y		0.40				
Methylene blue		0.065				
Agar		15.00				
Final pH (at 25°C) :		7.3 ± 0.2				
Directions :						
Suspend 27.46 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Add desired carbohydrate or other test substance in desired concentration. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. DO NOT OVERHEAT. Cool to 45-50°C and shake the medium in order to oxidize the methylene blue (i.e. restore its blue colour) and to suspend the precipitate, which is an essential part of the medium. Mix well and pour into sterile Petri plates.						
Principle :						
Peptone serves as source of carbon, nitrogen, and other essential growth nutrients. Eosin-Y and methylene blue serve as differential indicators. Phosphate buffers the medium. Coliforms produce purplish black colonies due to uptake of methylene blue-eosin dye complex, when the pH drops. The dye complex is absorbed into the colony. Non-fermenters probably raise the pH of surrounding medium by oxidative de-amination of protein, which solubilizes the methylene blue-eosin complex resulting in formation of colourless colonies.						
QC Tests – (I) Dehydrated Medium						
Colour :		Light pink to purple				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		7.3 ± 0.2				
Colour (post autoclaving/heating) :		Reddish purple with greenish cast & finely dispersed precipitate.				
Clarity (post autoclaving/heating) :		Slightly opalescent gel				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18–24 hrs. at 35 - 37°C (fungal cultures at 25-30°C for 24-48 hrs with added carbohydrate).						
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY			
	Escherichia coli (25922)	Luxuriant	Blue-black with green metallic sheen			
	Pseudomonas aeruginosa (27853)	Luxuriant	Colourless			
	Salmonella typhimurium (14028)	Luxuriant	Colourless			
	Candida albicans (10231)	Good-luxuriant	Colourless			
	Enterobacter aerogenes (13048)	Good	Pink-red			
	Staphylococcus aureus (25923)	None – poor	Colourless			
	Saccharomyces cerevisiae (9763)	None – poor	Cream			
	Streptococcus faecalis (29212)	Inhibited	--			
Precautions :		1. For Laboratory Use.				
		2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
		3. Store the medium away from light to avoid photooxidation.				
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 a basal medium to which different carbohydrates and other test substances may be added for differentiation and study of various enteric bacteria.				
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
B179		27.46g/l	18.2L	7.3 ± 0.2	Desired carbohydrate	121°C / 15 minutes

Disclaimer:

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