

TECHNICAL SHEET

B284	Phenol red broth base					
Formula						
Ingredients :						
	gms/lit.					
Proteose peptone	10.00					
Beef extract	1.00					
Sodium chloride	5.00					
Phenol red	0.018					
Final pH (at 25°C) : 7.4 ± 0.2						
Directions :						
Suspend 16.02 grams in 1000 ml purified/distilled water, mix well. Heat if necessary, to ensure complete solution. Distribute in fermentation tubes (tubes containing inverted Durham's tubes). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Aseptically add filter sterilized or autoclave sterilized carbohydrate solution to sterile basal medium.						
Principle :						
Proteose Peptone and Beef extract provide the carbon and nitrogen sources required for good growth of a wide variety of organisms. Sodium Chloride maintains the osmotic balance of the medium. Phenol Red serves as an indicator, turning from red – orange to yellow when acid is produced during fermentation of the added carbohydrate. Gas formation is seen in Durham's tubes.						
QC Tests – (I) Dehydrated Medium						
Colour :	Light yellow to pink					
Appearance :	Homogeneous Free Flowing powder					
(II) Rehydrated medium						
pH (post autoclaving/heating) :	7.4 ± 0.2					
Colour (post autoclaving/heating) :	Red to orange red					
Clarity (post autoclaving/heating) :	Clear					
(III) Q.C. Test Microbiological						
Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours. (longer if necessary)						
	MICROORGANISM (ATCC)	GROWTH	ACID (without carbohydrate)	GAS (without carbohydrate)	ACID (with dextrose)	GAS (with dextrose)
	Citrobacter freundii (8090)	Luxuriant	-	-	+ (Yellow)	+
	Enterobacter aerogenes (13048)	Luxuriant	-	-	+ (Yellow)	+
	Escherichia coli (25922)	Luxuriant	-	-	+ (Yellow)	+
	Klebsiella pneumoniae (13883)	Luxuriant	-	-	+ (Yellow)	+
	Proteus vulgaris (13315)	Luxuriant	-	-	+ (Yellow)	+
	Salmonella typhimurium (14028)	Luxuriant	-	-	+ (Yellow)	+
	Salmonella typhi (6539)	Luxuriant	-	-	+ (Yellow)	+
	Serratia marcescens (8100)	Luxuriant	-	-	+ (Yellow)	+
	Shigella flexneri (12022)	Luxuriant	-	-	+ (Yellow)	-
	Key : Acid - = negative reaction, no colour change or red.					
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.						
2. The addition of some carbohydrates to the basal medium may cause an acid reaction. To restore the original pH (and colour of the medium), add 0.1 N sodium hydroxide on a drop – by – drop basis. Take care not to make the medium too alkaline, which would prevent fermentation from occurring within the usual incubation period.						
3. To ensure accuracy of interpretation, uninoculated control tubes and/or inoculated Phenol Red Broth Base control tubes should be run in parallel with the fermentation tests.						
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Use :	As a basal medium to which carbohydrates are added for determination of fermentation reactions of pure cultures of microorganisms.				
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
B284	16.02 g/l	31.210 L	7.4 ± 0.2	Desired carbohydrate	121°C / 15 minutes