TECHNICAL SHEET

B286	**Phenol Red Dextrose Broth**
Formula	
Ingredients :	**gms/lit.**
Proteose peptone	10.00
Meat Extract B#	1.00
Sodium chloride	5.00
Phenol red	0.018
Dextrose	5.00
#- Equivalent to Beef extract	
Final pH (at 25°C) :	7.4 ± 0.2

Directions :

Suspend 21.02 grams in 1000 ml distilled water, mix well. Heat if necessary, to ensure complete dissolution. Distribute in fermentation tubes (tubes containing inverted Durham's tubes). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C.

Principle :

Proteose peptone and Meat Extract B serve as sources for carbon and nitrogen. Sodium chloride is the osmotic stabilizer. Phenol red is the pH indicator, which turns yellow at acidic pH i.e. on fermentation of dextrose. 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
	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	GAS	
	Citrobacter freundii (8090)	Luxuriant	+	+	
	Enterobacter aerogenes (13048)	Luxuriant	+	+	
	Escherichia coli (25922)	Luxuriant	+	+	
	Klebsiella pneumoniae (13883)	Luxuriant	+	+	
	Proteus vulgaris (13315)	Luxuriant	+	+	
	Salmonella typhimurium (14028)	Luxuriant	+	+	
	Salmonella typhi (6539)	Luxuriant	+	-	
	Serratia marcescens (8100)	Luxuriant	+	+	
	Shigella flexneri (12022)	Luxuriant	+	-	
	Key : - = negative reaction, no colour change or red. + = positive reaction, yellow colour				

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.

Refer disclaimer Overleaf

Use :	For Dextrose fermentation studies 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
B286	21.02 g/l	23.786 L	7.4 $\pm$ 0.2	Nil	121^0C / 15 minutes