B642	**Phenol Red Trehalose Broth**
Formula	
Ingredients :	**gms/lit.**
Proteose peptone	10.00
Beef extract	1.00
Sodium chloride	5.00
Phenol red	0.018
Trehalose	5.00
Final pH (at 25°C) :	7.4 ± 0.2

Directions :

Suspend 21 gms. in 1000 ml. distilled water Heat to dissolve the medium completely. Dispense in tubes containing inverted Durham's tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

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.

QC Tests – (I)Dehydrated Medium		
	Colour :	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 18 - 24 hrs.at 35 -37°C.

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
(+) = weak / slight

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.

Use :	**B642:** For Trehalose 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
B642	21.00 g/l	23.80 L	7.4 $\pm$ 0.2	Nil	121^0C / 15 minutes