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BW048 TRIPLE SUGAR IRON	AGAR								
Formula									
Ingredients : gms/l	i+								
Peptic digest of animal tissue 20.00									
Yeast extract 3.00									
Meat extract 3.00									
Lactose 10.00									
Sucrose 10.00									
Dextrose 1.00									
Sodium chloride 5.00									
Ferric sulphate heptahydrate 0.20									
Sodium thiosulphate, pentahydrate 0.30									
Ammonium iron(III) citrate 0.30									
Phenol red 0.024									
Agar 12.00									
Final pH (at 25°C) : 7.4 <u>+</u> 0.2									
Directions :									
Suspend 65 gms.in 1000 ml. distilled water									
Mix well and distribute into test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15									
minutes. Allow the medium to set in sloped for	orm with a butt ab	out 1 inch	long.						
Principle :									
Beef extract, Yeast extract, Peptic digest of a									
nitrogen, vitamins, and minerals. Triple sug									
lactose and surcrose). When these carbohyc									
is detected by the phenol red indicator.									
production and red for alkalinization. So									
Hydrogen sulfide then reacts with an iron chloride maintains the osmotic balance of the				sunde.	Sodium				
QC Tests – (I)Dehydrated Medium		a soliuliyi	ny ayent.						
Colour :	Light nink								
	Light pink								
Appearance :	Homogeneous Free Flowing powder								
(II) Dobydrated modium	Homogeneous Fr	ee Flowing	powder						
(II)Rehydrated medium		ee Flowing	powder						
PH (post autoclaving/heating) :	7.4 ± 0.2	ee Flowing	powder						
PH (post autoclaving/heating) : Colour (post autoclaving/heating) :	7.4 ± 0.2 Pinkish red		powder						
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) :	7.4 ± 0.2		powder						
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological	7.4 ± 0.2 Pinkish red Clear to slightly o	palescent	powder						
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18	7.4 ± 0.2 Pinkish red Clear to slightly o - 48 hrs.at 35- 3	opalescent 37°C.							
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC)	7.4 ± 0.2 Pinkish red Clear to slightly o - 48 hrs.at 35- 3 GROWTH	opalescent 37°C. SLANT	BUTT	GAS	H ₂ S				
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35- 3 GROWTH Luxuriant	opalescent 37°C. SLANT A	BUTT	+	H ₂ S +				
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35- 3 GROWTH Luxuriant Luxuriant	opalescent 37°C. SLANT A A	BUTT A A	+ +					
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35- 3 GROWTH Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A	BUTT A A A A	+++++++++++++++++++++++++++++++++++++++					
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922) Klebsiella pneumoniae (13883)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35-3 GROWTH Luxuriant Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A A A	BUTT A A A A A	+ +	+				
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922) Klebsiella pneumoniae (13883) Proteus vulgaris (13315)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35-3 GROWTH Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A A K	BUTT A A A A A A	+ + + + -					
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922) Klebsiella pneumoniae (13883) Proteus vulgaris (13315) Salmonella paratyphi A	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35-3 GROWTH Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A A K K	BUTT A A A A A A A A	+++++++++++++++++++++++++++++++++++++++	+ - - - + -				
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922) Klebsiella pneumoniae (13883) Proteus vulgaris (13315) Salmonella proteus proteus (6539)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35-3 GROWTH Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A A K K K	BUTT A A A A A A A A A A	+ + + + + - + - +	+ - - + - +				
PH (post autoclaving/heating) : Colour (post autoclaving/heating) : Clarity (post autoclaving/heating) : (III)Q.C. Test Microbiological Cultural characteristics observed after 18 MICROORGANISM (ATCC) Citrobacter freundii (8090) Enterobacter aerogenes (13048) Escherichia coli (25922) Klebsiella pneumoniae (13883) Proteus vulgaris (13315) Salmonella prophi (6539) Salmonella typhi (6539)	7.4 ± 0.2 Pinkish red Clear to slightly of - 48 hrs.at 35- 3 GROWTH Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant Luxuriant	opalescent 37°C. SLANT A A A A A K K K K	BUTT A A A A A A A A A A A A	+ + + + -	+ - - - + -				
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Precautions :	1. For Laboratory Use.							
r recautions .	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. Hydrogen sulfide production may be evident on Kligler Iron Agar but negative							
	on Triple Sugar Iron Agar. Studies by Bulmash and Fulton showed that the							
	utilization of sucrose could suppress the enzymatic mechanisms responsible for							
	H_2S production. Padron and Dockstader found that not all H_2S – positive							
	Salmonella are positive on TSI.							
	3. Sucrose is added to TSI to eliminate some sucrose – fermenting non – lactose fermenters such as Proteus and Citrobacter spp.							
					be performed for			
	4. Further biochemical tests and serological typing must be performed for definite identification and confirmation of organisms.							
					Sugar Iron Agar			
	5. Do not use an inoculating loop to inoculate a tube of Triple Sugar Iron Agar. While stabbing the butt, mechanical splitting of the medium occurs, causing a							
	false positive result for gas production.							
	6. A pure culture is essential when inoculating Triple Sugar Iron Agar. If							
	inoculated with a mixed culture, irregular observations may occur.							
	7. Tubes should be incubated with caps loosened. This allows a free exchange of air, which is necessary to enhance the alkaline condition on the slant.							
Use :	To differentiate enteric pathogens by ability to determine carbohydrat							
	fermentation and hydrogen sulphide production.							
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.							
Packing :	500 gm. bottle							
Product profile:	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization			
		Preparation						
		(500g)						
BW048	65g/l	7.692L	7.4 ± 0.2	NIL	121ºC /15 min.			

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained

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