B987	CHRISTENSEN CITRATE SULPHITE AGAR			
Formula				
Ingredients:		**gms/lit.**		
Sodium citrate		3.00		
Dextrose		0.20		
Yeast extract		0.50		
L-Cysteine hydrochloride		0.10		
Ferric ammonium citrate		0.40		
Potassium phosphate		1.00		
Sodium chloride		5.00		
Sodium thiosulphate		0.08		
Phenol red		0.012		
Agar		14.00		
Final pH (at 25°C): 6.7± 0.2				
Directions:				
Suspend 24.29 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into test tubes. Sterilize by autoclaving at 12 to15 lbs pressure (118 to 121°C) for 15 minutes. Cool the tubes in slanted position to give slants with generous butts.				
Principle:				
Medium constituent yeast extract provide the necessary nutrients mainly nitrogenous and vitamins for the growth of the organisms. L-cysteine hydrochloride is a reducing agent. Dextrose is the fermentable carbohydrate. Sodium citrate is the energy source for citrate utilizing organisms. The reduction of ferric ammonium citrate to iron sulphide by H2S producing organisms is indicated by blackening of the medium. Sodium thiosulphate enhances H2S production.				
QC Tests – (I)Dehydrated Medium				
	Colour :	Light yellow to light pink		
	Appearance:	Homogeneous Free Flowing powder		
(II)Rehydrated medium				
	pH (post autoclaving/heating):	6.7 ± 0.2		
	Colour (post autoclaving/heating):	Orange red		
	Clarity (post autoclaving/heating):	Very slightly opalescent gel		
(III)Q.C. Test Microbiological				
	Cultural characteristics observed after 18- 24 hrs. at 35-37°C.			
	MICROORGANISM (ATCC)	GROWTH	CITRATE UTILISATION	H2S
	Escherichia coli (25922)	Luxuriant	negative reaction, no colour change	negative reaction, no colour change
	Enterobacter aerogenes (13048)	Luxuriant	positive reaction, cerise colour	negative reaction,no colour change
	Salmonella typhimurium (14028)	Luxuriant	positive reaction, cerise colour	positive reaction, blackening of medium
	Salmonella enteritidis(13076)	Luxuriant	positive reaction, cerise colour	positive reaction, blackening of medium
	Klebsiella pneumoniae (13883)	Luxuriant	weakly positive, orange-pink colour	negative reaction,no colour change
	Shigella flexneri (12022)	Luxuriant	negative reaction, no colour change	negative reaction,no change

Refer disclaimer Overleaf

	Shigella sonnei (25931)	Luxuriant	negative reaction, no colour change	negative reaction,no change

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.				
Use :	It is used for the differentiation of enteric bacilli on the basis of citrate utilization 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 Preparation (500g)	pH (25°C)	Supplement	Sterilization
B987	24.29 g/l	20.58 L	6.7 ± 0.2	Nil	121^0C / 15 minutes