B370	SS AGAR, MODIFIED
Formula	
Ingredients :	**gms/lit.**
Peptic digest of animal tissue	5.00
Meat Extract B#	5.00
Lactose	10.00
Bile salt mixture	5.50
Sodium citrate	10.00
Sodium thiosulphate	8.50
Ferric citrate	1.00
Brilliant green	0.00033
Neutral red	0.025
Agar	12.00
#- Equivalent to Beef extract	
Final pH (at 25°C) :	7.2 ± 0.2

Directions :

Suspend 57.02 grams in 1000 ml purified / distilled water. Heat to boiling with frequent agitation to dissolve the medium completely. DO NOT AUTOCLAVE OR OVERHEAT. Overheating may destroy the selectivity of the medium. Cool to about 45-50°C. Mix and pour into sterile Petri plates.

Principle :

In SS Agar, Peptic digest of animal tissue and Beef extract provide essential growth nutrients. Bile salts and brilliant green are complementary in inhibiting gram – positive bacteria, most coliform bacteria, and the swarming phenomenon of Proteus spp., while allowing Salmonella spp. to grow. Sodium thiosulfate and ferric citrate allow the detection of hydrogen sulfide by the production of colonies with black centers. Lactose is the carbohydrate present in SS Agar. Neutral red and brilliant green are present as pH indicators.

QC Tests – (I)Dehydrated Medium			
	Colour :	Light yellow to pink	
	Appearance :	Homogeneous Free Flowing powder	
(II)Rehydrated medium			
	pH (post autoclaving/heating) :	7.2 ± 0.2	
	Colour (post autoclaving/heating) :	Reddish orange	
	Clarity (post autoclaving/heating) :	Clear to slightly opalescent	
(III)Q.C. Test Microbiological			
	Cultural characteristics observed after 18 – 24 hrs. at 35 – 37°C.		
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY
	Salmonella typhimurium (14028)	Good-luxuriant	Colourless with black center
	Salmonella typhi (6539)	Good-luxuriant	Colourless with black center
	Salmonella enteritidis (13076)	Good-luxuriant	Colourless with black center
	Salmonella Choleraesuis (12011)	Good-luxuriant	Colourless with black center
	Shigella flexneri (12022)	Good	Colourless
	Escherichia coli (25922)	fair	pink with bile precipitate
	Enterobacter aerogenes (13048)	fair	Cream pink
	Proteus mirabilis (25933)	fair-good	Colourless, may have black center
	Enterococcus faecalis (29212)	None to poor	Colourless

Refer disclaimer Overleaf

Precautions :	1. For Laboratory Use.				
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
	3. IRRITANT. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed.				
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. SS Agar is a highly selective medium. For this reaction, it is not recommended as the sole medium for primary isolation of Shigella. Some strains of Shigella may not grow.				
	3. A few nonpathogenic organisms may grow on SS Agar. These organisms can be differentiated by their ability to ferment lactose.				
Use:	For the selective isolation and differentiation of Salmonella and Shigella species from pathological specimens, suspected foodstuffs etc.				
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
B370	57.02g/l	8.769 L	7.2 ± 0.2	NIL	DO NOT AUTOCLAVE OR OVERHEAT