TECHNICAL SHEET

B1501	**Fluid Selenite Cystine Broth (Twin Pack)**
Formula	
Ingredients :	**gms/lit.**

As per ISO 6579-1		**B1501 - Fluid Selenite Cystine Broth (Twin Pack)**	
Ingredients	**g / L**	**Ingredients**	**g / L**
Part A		**Part A**	
Tryptone	5.000	Casein enzymic hydrolysate	5.00
Lactose	4.000	Lactose	4.00
Disodium hydrogen phosphate dodecahydrate	10.000	Disodium phosphate.12H2O	10.00
L-Cystine	0.010	L-Cystine	0.01
Part B		**Part B**	
Sodium hydrogen selenite	4.000	Sodium hydrogen selenite	4.00
Final pH (at 25°C)	7.0 ± 0.2	Final pH (at 25°C)	7.0 ± 0.2

Final pH (at 25°C) : 7.0 ± 0.2

Directions :

Suspend 4.0 grams of Part B in 1000 ml distilled water. Add 13.0 grams of dehydrated Part A medium. Warm to dissolve the medium completely. Distribute in sterile test tubes. Sterilize in a boiling water bath or in a free flowing steam for 10 minutes. DO NOT AUTOCLAVE. Excessive heating is detrimental. Discard the prepared medium if large amount of selenite is reduced. (Indicated by red precipitate at the bottom of tube/bottle).
Caution: Sodium hydrogen selenite (Sodium bi-selenite) is very toxic, corrosive agent and causes teratogenicity and hence should be handled with great care. Upon contact with skin, wash immediately with a lot of water.

Principle :

Casein enzymic hydrolysate provide nitrogenous substances. Lactose maintains the pH in medium as selenite is reduced by bacterial growth and alkali is produced. An increase in pH lessens the toxicity of the selenite and results in overgrowth of other bacteria. The acid produced by bacteria due to lactose fermentation serves to maintain a neutral pH. Phosphate maintains a stable pH and also lessens the toxicity of selenite. L-cystine improves recovery of Salmonellae.

QC Tests – (I)Dehydrated Medium		
	Colour :	Part A : Off-white to light yellow Part B : White to cream
	Appearance :	Part A and B :Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	7.0 ± 0.2
	Colour (post autoclaving/heating) :	Light yellow
	Clarity (post autoclaving/heating) :	Clear to slightly opalescent

(III)Q.C. Test Microbiological

Cultural characteristics observed after 18-24 hrs.at 35- 37°C when subcultured on Mac Conkey Agar (B238).

MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY
Escherichia coli ATCC 25922	little-none	pink w/ bile ppt
Salmonella Choleraesuis ATCC 12011	luxuriant	Colourless
Salmonella Typhi ATCC 6539	luxuriant	Colourless
Salmonella Typhimurium ATCC 14028	luxuriant	Colourless

Precautions :

1. For Laboratory Use.
2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
3. Sodium hydrogen selenite (Sodium biselenite) is very toxic, corrosive agent and causes teratogenicity and hence should be handled with great care. Upon contact with skin, wash immediately with a lot of water.

Limitations :

1. DO NOT AUTOCLAVE. Excessive heating is detrimental.
2. Do not incubate the broth longer than 24 hours as inhibitory effect of selenite reduces after 6 - 12 hours of incubation

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Use :	This medium is recommended as an enrichment medium for the isolation of Salmonellae from food and clinical specimens such as faeces, urine or other pathological materials. The composition and performance criteria are in accordance with ISO 6579-1: 2017				
Storage :	Dehydrated medium- below 30 ° C Prepared mediums– Between 2 to 8°C.				
Packing :	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1501	13.0 g of Part A + 4.0 g of Part B	38.461L	7.0 ± 0.2	NIL	DO NOT AUTOCLAVE