

B719	SELENITE CYSTINE BROTH BASE					
Formula						
Ingredients :			gms/lit.			
Casein enzymic hydrolysate			5.00			
Lactose			4.00			
Disodium phosphate			10.00			
L-cystine			0.01			
Final pH (at 25°C) : 7.0 ± 0.2						
Directions :						
Suspend 4 gms. of sodium hydrogen selenite in 1000 ml. distilled water. Add 19 gms. of B719. Mix well. Warm to dissolve the medium completely. Distribute in sterile test tubes. Sterilize in a boiling water bath or 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)						
Principle :						
Casein enzymic hydrolysate provides the nitrogen, vitamins and amino acids in Selenite Broth. Lactose is a fermentable carbohydrate. Selenite is reduced by organism growth. A rise in pH decrease the selective activity of the selenite. The acid produced by lactose fermentation helps to maintain a neutral pH. Sodium selenite inhibits the growth of gram – positive bacteria and many gram – negative bacteria. Sodium phosphate is a buffering agent.						
QC Tests – (I)Dehydrated Medium						
Colour :			Light yellow			
Appearance :			Homogeneous Free Flowing powder			
(II)Rehydrated medium						
pH (post autoclaving/heating) :			7.0 ± 0.2			
Colour (post autoclaving/heating) :			Very light amber to light yellow			
Clarity (post autoclaving/heating) :			Clear			
(III)Q.C. Test Microbiological						
Cultural characteristics observed after 18 – 24 hrs.at 35-37°C.						
MICROORGANISM (ATCC)		RECOVERY		COLOUR OF COLONY*		
Salmonella typhimurium (14028)		Good –Luxuriant		Colourless		
Salmonella cholerasuis (12011)		Good – Luxuriant		Colourless		
Salmonella typhi (6539)		Good – Luxuriant		Colourless		
Escherichia coli (25922)		No increase in numbers		White to pink with bile precipitate		
Key: * = when subcultured on MacConkey Agar.						
Precautions :		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. 3. VERY TOXIC. Fatal if inhaled or swallowed. (US) very toxic by inhalation and if swallowed. (EC) danger of cumulative effects. (EC) 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.				
Use :		B719: For selective enrichment of Salmonella and possibly Shigella sonnei from faeces, urine, water and foodstuffs.				
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
B719		19+4g/l	26.315L	7.0 ± 0.2	Sodium hydrogen selenite	DO NOT AUTOCLAVE.