

**TECHNICAL SHEET**

B026		SELENITE CYSTINE BROTH (FLUID SELENITE CYSTINE MEDIUM) TWIN PACK			
Formula					
Ingredients		gms/lit.			
Part A					
Casein enzymic hydrolysate		5.00			
Lactose		4.00			
Disodium phosphate		10.00			
L-Cystine		0.01			
Part B					
Sodium hydrogen selenite		4.00			
Final pH (at 25°C) : 7.0 ± 0.2					
Directions :					
Suspend 19.01 grams of part A in 1000 ml distilled water. Add 4 grams of sodium hydrogen selenite Part B. 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). WARNING- Sodium hydrogen 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 provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential nutrients. Lactose maintains the pH of medium. 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. Sodium phosphate maintains a stable pH and also lessens the toxicity of selenite. L-cystine improves recovery of Salmonella. Enriched broth is subcultured on differential plating media such as Bismuth Sulphite Agar (B115), XLD Agar (b361) etc. Do not incubate the broth longer than 24 hours as inhibitory effect of selenite decreases after 6-12 hours of incubation.					
QC Tests – (I)Dehydrated Medium					
	Colour :	Part A: White to Light yellow		Part B: White to cream	
	Appearance :	Part A: Homogeneous Free Flowing powder		Part B: Crystalline powder	
(II)Rehydrated medium					
	pH (post autoclaving/heating) :	7.0 ± 0.2			
	Colour (post autoclaving/heating) :	Light yellow			
	Clarity (post autoclaving/heating) :	Clear			
(III)Q.C. Test Microbiological					
	Cultural characteristics observed with added sodium hydrogen selenite when subculture on MacConkey Agar (B238) after an incubation at 35-37°C for 18-24 hours.				
	MICROORGANISM (ATCC )	GROWTH		COLOUR OF COLONY	
	Escherichia coli (25922)	none to poor (no increase in numbers)		pink with bile precipitate	
	Salmonella typhimurium (14028)	Good - Luxuriant		Colourless	
	Salmonella cholerae suis (12011)	Good - Luxuriant		Colourless	
	Salmonella typhi (6539)	Good - 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. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
	2. A brick red precipitate may appear if Selenite Cystine Broth is overheated during preparation or exposed to excessive moisture during storage.				
Use :	As an enrichment medium for isolation of Salmonellae in foods, dairy products and materials of sanitary importance and clinical specimens.				
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
	B026	Part A: 19.01 g/l Part B: 4g/l	21.739L	7.0 ± 0.2	NIL

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.  
The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.