

**MM0047**

## **Selenite Cystine Broth**

### **Use and description:**

Selenite cystin broth is an enrichment medium for detection and isolation of *Salmonella* species from feces and food products. Addition of sodium cystine and phosphate buffer enhanced the recovery of salmonellae. The selenite inhibits coliforms and enterococci but *Pseudomonas* and *Proteus* are allowed to grow.

### **Composition per liter:**

Peptone.....5.00 g  
Lactose.....4.00 g  
Sodium phosphate.....10.00 g  
L-cystine.....0.01 g  
Sodium hydrogen selenite.....4.00 g

**Final pH of the ready to use medium:** 7.0 ± 0.2

### **Medium preparation:**

Add 23.0 grams of dehydrated culture medium ( 19 w/o Sodium Biselenite ! ) to 1 liter of distilled water. Mix thoroughly. Gently heat. DO NOT AUTOCLAVE THIS MEDIUM. Distribute into sterile tubes in 10 ml volumes.

### **Quality specifications:**

Dehydrated medium: homogeneous, light beige fine powder.

Ready to use medium: clear, very pale yellow with a slight precipitate if any.

### **Microbiological response:**

<b>Organism</b>	<b>Result</b>
<i>Escherichia coli</i> ATCC 25922	Little or no growth
<i>Salmonella typhi</i> ATCC 6539	Good growth
<i>Shigella flexneri</i> ATCC 12022	Little or no growth

### **Storage:**

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.