

RTA.KK.284 Revision Date/Revision Number:-/0 Issue Date: 01.11.2014

# SELENITE F BROTH (5 ML)

## **INTENDED USE:**

Selenite F Broth is an enrichment medium for the isolation of Salmonella and some species of Shigella.

## PRINCIPLE AND INTERPRETATION:

The casein peptone provides essential nitrogenous and carbon compounds. The lactose in the medium serves to maintain a uniform pH. When selenite is reduced by the growth of bacteria, alkali is produced and such increase in pH would lessen the toxicity of the selenite and result in overgrowth of extraneous bacteria. Sodium selenite inhibits many species of gram-positive and gram-negative bacteria including enterococci and coliforms.

## **COMPOSITION:**

Ingredients	Gr/Liter
Pancreatic Digest of Casein	5 gr
Lactose	4 gr
Sodium Selenite	4 gr
Sodium Phosphate	10 gr

\*\*\*Formula adjusted, standardized to suit performance parameters

**pH**: 7,0  $\pm$  0,2

## **PRECAUTIONS:**

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration, or other signs of deterioration.

#### **TEST PROCEDURE:**

Incubation at a temperature of 35±2°C and observed after 24 hours.

# QUALITY CONTROL:

**1.Sterility Control:** 

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

#### 2.Phsical/Chemical Control

**pH**: 7,0  $\pm$  0,2 **Apperance:** Light amber

**3.Microbiological Control:** Incubation at a temperature of 35±2°C and observed after 24 hours.

Microorganism	Inoculum	Results	
	(CFU)	Growth	Reaction
Salmonella typhimurium ATCC 14028	10-100	Good	Good
Escherichia coli ATCC 25922	10-100	Good	Good

# LIMITATIONS OF THE PROCEDURE:

Enrichment broths should not be used as the sole isolation medium. They are to be used in conjunction with selective and nonselective plating media to increase the probability of isolating pathogens, especially when they may be present in small numbers. For identification, organisms must be in pure culture. Morphological, biochemical, and/or serological tests should be performed for final identification.

#### STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2-12°C. Use before expiry date on the label..Do not use beyond stated expiry date.



RTA.KK.284 Revision Date/Revision Number:-/0 Issue Date: 01.11.2014

## DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

# PACKAGING:

Katalog Number: 01013 Content/Packaging: 50 Tubes/Box

# **REFERENCES:**

1. Leifson, E. 1936. New selenite selective enrichment media for the isolation of typhoid and paratyphoid Salmonella bacilli. Am. J. Hyg.24:423-432.

2. Taylor, W.I., and B. Harris. 1965. Isolation of Shigellae, II. Comparison of plating media and enrichment broths. Am. J. Clin. Pathol. 44:476-479.

3. Nachamkin, I. 1999. Campylobacter and Arcobacter, p. 716-726. In P.R. Murray, E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Yolken (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.

4. National Committee for Clinical Laboratory Standards. 2001. Approved Guideline M29-A2. Protection of laboratory workers from occupationally acquired infections, 2nd ed. NCCLS, Wayne, Pa.

5. Garner, J.S. 1996. Hospital Infection Control Practices Advisory Committee, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Guideline for isolation precautions in hospitals. Infect. Control Hospital Epidemiol. 17:53-80. 6. U.S. Department of Health and Human Services. 1999. Biosafety in microbiological and biomedical laboratories, HHS Publication (CDC), 4th ed. U.S. Government Printing Office, Washington, D.C

