

## THTS 008 – TRANSPORT SWABS W/ SELENITE MEDIUM (A)

### INTENDED USE

With 2.0ml Medium recommended for enrichment of enteric organisms from fecal specimens.

### PRODUCT SUMMARY AND EXPLANATION

Transport Medium is generally a non-nutritive, chemically defined, buffered medium. The sole purpose of this medium is to maintain the viability of organisms during the time from collection to examination of the specimen. Transport Medium should be essentially non-nutritive so that the test organisms do not increase in numbers during transport. Klett first demonstrated the selective inhibitory effects of selenite and Guth used it to isolate *Salmonella Typhi*.

Leifson fully investigated selenite and formulated the media. Enrichment media are routinely employed for detection of pathogens in faecal specimens as the pathogens are present in a very small number in the intestinal flora. Selenite Broth is useful for enriching Salmonella in the nonacute stages of illness when organisms occur in the faces in low numbers and for epidemiological studies to enhance the detection of low number of organisms from asymptomatic or convalescent patients.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	5.000
Lactose	4.000
Sodium hydrogen phosphate	10.000
Sodium hydrogen selenite	4:000

### PRINCIPLE

Components of the medium as tryptone and lactose helps to maintain viability of the cells while being nitrogen and carbon sources. 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 hydrogen phosphate maintains a stable pH and also lessens the toxicity of selenite. Enriched Selenie medium can be subcultured on differential plating media such as Bismuth Sulphite Agar, Brilliant Green Agar, XLD Agar etc.

**Note:** The specimen should be inoculated in suitable medium as soon as possible and must not be kept at room temperature for more than 24 hours. Some contaminants may also grow, if specimen is kept for longer period in transport medium.

### INSTRUCTION FOR USE

1. Use the medium, provided along with the swab to collect and transport the microbiological sample.
2. Collect the sample with the sterile swab and insert the capped swab with the sample till the bottom of the medium. Tighten the cap firmly
3. The sample and viability of organism(s) will be maintained during transportation.
4. After the transportation, the specimen should be inoculated in proper medium as soon as possible.

### QUALITY CONTROL SPECIFICATIONS

**Appearance** : Colorless to pale yellow liquid medium in tubes.  
**pH (at 25°C)** : 7.0 ±0.2



**Sterility Check** : Passes release criteria

### INTERPRETATION

Culture characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Recovery on SCDA	Incubation Temperature	Incubation Period
<i>Salmonella choleraesius</i>	12011	50-100	Good-Luxuriant	35-37°C	18- 72 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Good-Luxuriant	35-37°C	18- 72 Hours
<i>Salmonella Typhi</i>	6539	50-100	Good-Luxuriant	35-37°C	18- 72 Hours
<i>Escherichia coli</i>	25922	50-100	None-Poor	35-37°C	18- 72 Hours
<i>Escherichia coli</i>	8739	50-100	None-Poor	35-37°C	18- 72 Hours

### PACKAGING:

In pack size of 50 No.

### STORAGE

On receipt, store ready-to-use disposable swabs in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times.

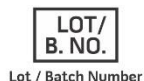
**Product Deterioration:** Do not use product if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

### DISPOSAL

After use, prepared media, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### REFERENCES

1. Klett A., 1900, Zeitsch Für Hyg. Und. Infekt., 33: 137.
2. Guth F., 1926, Zbl. Bakt. I. Orig., 77:487.
3. Leifson E., 1936, Am. J. Hyg., 24(2): 423.
4. Kelly, Brenner and Farmer, 2003, Manual of Clinical Microbiology, 8th ed., Lennett and others (Eds.), ASM, Washington, D.C. M40-A2. Clinical and Laboratory Standards



**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**

**Revision: 16 March., 2022**

