

## TM 1606 - SALENRICH BROTH

### INTENDED USE

For enrichment of sublethally injured *Salmonellae* from food products.

### PRODUCT SUMMARY AND EXPLANATION

This medium is recommended as pre enrichment medium for *Salmonella* with added SalEnrich Selective Supplement. Growth of contaminating flora is inhibited due to tetrathionate, brilliant green and ox bile.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	5.000
Meat peptone	5.000
Sodium chloride	5.000
Calcium carbonate	20.000

### PRINCIPLE

Casein enzyme hydrolysate and meat peptone provides nitrogenous sources to the growing *Salmonellae*. Sodium chloride helps in maintaining osmotic equilibrium. The supplement contains potassium tetrathionate, ox bile, brilliant green and additional calcium carbonate. Brilliant green and ox-bile inhibits both gram-positive as well as some selected gram-negative organisms. Potassium tetrathionate inhibits accompanying microbial flora except *Salmonella*.

### INSTRUCTION FOR USE

- Dissolve 35 grams in 1000 ml distilled water.
- Heat just to boiling.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- After sterilization slight white precipitate may develop due to the presence of calcium carbonate which does not affect the performance of the medium.
- On prolonged storage of medium marginal pH may be increased.

#### Preliminary Enrichment:

- Dissolve 25 grams homogenized sample in sterile 225 ml broth base and incubate for 6-8 hours at 35-37°C.
- Dispense aseptically the incubated broth in 10 ml quantity to sterile test tubes.

#### Secondary Selective Enrichment:

- Aseptically add 1ml of rehydrated contents of Salenrich Selective Supplement to each 10 ml of the primary enrichment culture and allow to stand for 30 minutes.
- Shake vigorously and then incubate for further 18-22 hours at 35-37°C.
- For further detection of *Salmonella*, streak a sample onto appropriate selective media.

### QUALITY CONTROL SPECIFICATIONS



<b>Appearance of Powder</b>	: Cream to yellow homogeneous free flowing powder.
<b>Appearance of prepared medium</b>	: Preliminary Enrichment Broth Base: Light amber coloured clear solution with precipitate at bottom. Selective Enrichment Medium (with added supplement): Bluish green coloured opalescent solution with white precipitate at bottom.
<b>pH (at 25°C)</b>	: 7.1±0.2

## INTERPRETATION

Cultural characteristics observed when subcultured on MacConkey Agar after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Poor-fair	35-37°C	18-24 Hours
<i>Salmonella</i> Typhimurium	14028	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	≥10 <sup>3</sup>	Inhibited	35-37°C	18-24 Hours

## PACKAGING:

In pack size of 500 gm bottles.

## STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

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

## DISPOSAL

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

## REFERENCES

1. Weber, A. Über die Brauchbarkeit von Salmosyst zur Anreicherung von Salmonellen aus Kotproben von Tieren-Berl. Munch Tierarztl, Wschr., 101:57-59 (1988)
2. Ossmer, R. Salmosyst and Rambach agar, A rapid alternative for the detection of Salmonella, Congress-Poster-Salmonella and Salmonellosis-Ploufragan/Saint-Brieux-france, September, 1992.





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

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**