TM 2395 – TRYPTONE SOYA-TRYPTOSE BROTH

INTENDED USE

For identification of *Salmonella* species from food samples in accordance with FDA BAM, 1998.

PRODUCT SUMMARY AND EXPLANATION

Salmonella is a genus of rod-shaped, Gram-negative, non-spore-forming, predominantly motile enterobacteria with peritrichous flagella. Most of the species are pathogenic, and the infections are mainly due to the ingestion of contaminated food.

Tryptone Soya Tryptose Broth is used for serological identification of *Salmonella* species with respect to 'polyvalent flagellar (H) test' in accordance with FDA BAM, 1998. Add 25g of the food sample(s) suspected to be contaminated with *Salmonella* into 225ml culture broth (1:9 ratio) and incubate at 35 ± 2.0º C for 24 ± 2.0 hours in accordance with the BAM protocol. The incubated sample is processed for isolation of the species by inoculation into selective media such as Selenite broth, Fluid Tetrathionate Medium w/o Iodine and BG, Modified or Rappaport Vassiliadis Medium, Modified and incubation for 24hrs at appropriate temperatures. Thoroughly mix and streak a 3 mm loopful of the incubated broth on Bismuth Sulphite Agar, XLD agar, and Hektoen Enteric Agar, w/ 1.2% agar. Organism is identified by its colony characteristics in respective media. The organism can be confirmed through biochemical and serological tests. Serological tests include identification of polyvalent flagellar (H) antigen. Tryptone soya tryptose broth is used for the initial inoculum preparation for this test.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	8.500
Soya peptone	1.500
Sodium chloride	5.100
Dextrose (Glucose)	1.770
Dipotassium hydrogen phosphate	1.250
Tryptose	10.380
Yeast extract	3.000

PRINCIPLE

Tryptone, Tryptose, Soya peptone and Yeast extract provide necessary carbon, nitrogen compounds, long chain amino acids, vitamins, and other trace mineral sources for the growth of microrganisms. Dextrose provide necessary carbon source to the medium. Sodium chloride maintains the osmotic equilibrium of the medium. Dipotassium hydrogen phosphate acts as the buffering agent.

INSTRUCTION FOR USE

- Suspend 31.50 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense 5ml portions into 16×150mm test tube.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured clear solution without any precipitate.
pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU)	Growth	Incubation Temperature	Incubation Period
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	35-37°C	18-24 Hours
Escherichia coli	8739	50-100	Luxuriant	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Luxuriant	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Luxuriant	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	35-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

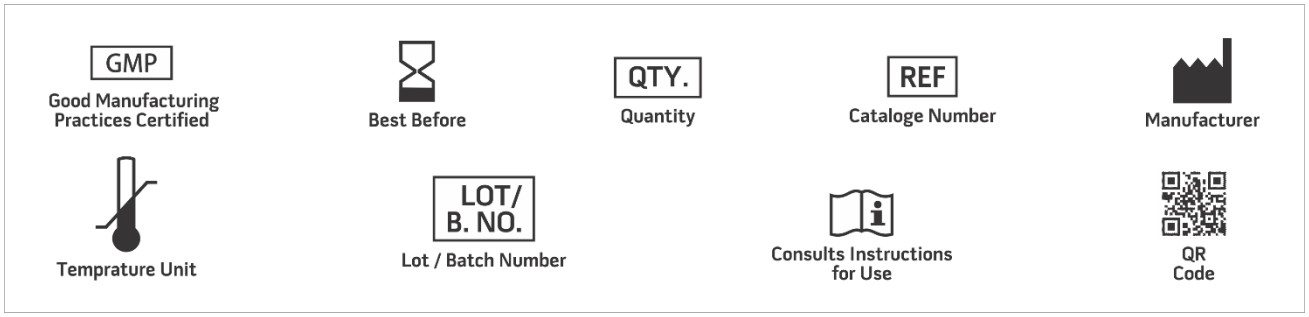
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
2. MacFaddin, J. F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria vol. 1. Baltimore: Williams and Wilkins.
3. FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
4. Forbes, B. A., Sahm, D. F . and Weissfield, A. S. 2002. Bailey and Scott's Diagnostic Microbiology. 11 ed. St Louis: The C.V. Mosby Co.



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

***For Lab Use Only**

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