

TM 2397 – TRYPTONE WATER BROTH W/ BCP

INTENDED USE

For the cultivation of *Salmonella* species from food.

PRODUCT SUMMARY AND EXPLANATION

Examination of various types of food products for presence of *Salmonella* requires methods different from those used in clinical laboratories. The need for such method is due to the generally low numbers of *Salmonellae* in foods and the frequently poor physiological state of these pathogens following exposure to stressful conditions during food processing or storage. Injured or debilitated *Salmonella* are resuscitated in a non-selective broth medium. Although qualitative recovery of foodborne *Salmonella* is generally sought, the analytical approach used in conventional methods can be adapted for the enumeration of *Salmonella* by MPN techniques.

It is generally accepted that pre-enrichment of processed foods in a non-selective broth medium facilitates detection of sublethally injured *Salmonella*. The ideal pre-enrichment broth should provide for the repair of cell damage, dilute toxic or inhibitory substances and be of such nutritive capacity so as to favour a better growth of *Salmonella*. In the analysis of foods for *Salmonella*, the pre-enriched cultures are transferred to an enrichment broth and further streaked on one or more selective media. Tryptone Water Broth w/BCP is recommended and prepared as per APHA for cultivating *Salmonella* species from foods.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Dextrose	5.000
Dipotassium phosphate	1.250
Yeast extract	1.000
Bromocresol purple	0.040

PRINCIPLE

Casein enzymic hydrolysate and yeast extract provide the essential nitrogenous compounds, vitamin B complex and other growth nutrients for the growth of *Salmonellae*. Dextrose is the fermentable carbohydrate. Bromocresol purple is the pH indicator. The medium is buffered by dipotassium phosphate.

INSTRUCTION FOR USE

- Suspend 17.29 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to pale green homogeneous free flowing powder.
Appearance of prepared medium : Purple coloured clear solution without any precipitate.
pH (at 25°C) : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Color of the medium	Incubation Temperature	Incubation Period
<i>Salmonella</i> Enteritidis	13076	50-100	Luxuriant	Yellow	35-37°C	18-24 Hours
<i>Salmonella</i> Typhimurium	14028	50-100	Luxuriant	Yellow	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

- Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
- Ray B. Jr., Jezeski J. J. and Busta F. F., 1972, J. Milk food Technol., 35:670.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
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