

Technical Information

Tryptone Water Broth w/ BCP

Product Code: DM 2198

Application: - Tryptone Water Broth is used for the cultivation of *Salmonella* species from foods.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	10.000
Dextrose	5.000
Dipotassium phosphate	1.250
Yeast extract	1.000
Bromocresol purple	0.040
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Examination of various types of food products for presence of *Salmonella* requires methods which are 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⁽²⁾. 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⁽¹⁾ for cultivating *Salmonella* species from foods. 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.

Methodology

Suspend 17.29 grams of powder media in 1000 ml distilled water. Shake well & heat if necessary to dissolve the medium completely. Dispense and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Cream to pale green homogeneous free flowing powder

Colour and Clarity of prepared medium

Purple coloured clear solution without any precipitate.

Reaction

Reaction of 1.73% w/v aqueous solutions at 25°C. pH : 7.0±0.2

pH range

6.80-7.20

Cultural Response / characteristics

DM 2198: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.



Dehydrated Culture Media
Bases / Media Supplements

Organism	Inoculum (CFU)	Growth	Color of medium
<i>Salmonella Enteritidis</i> ATCC 13076	50-100	luxuriant	Yellow
<i>Salmonella Typhimurium</i> ATCC 14028	50-100	luxuriant	yellow

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8⁰ in sealable plastic bags for 2-5 days.

Further Reading

1. 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.
2. Ray B. Jr., Jezeski J. J. and Busta F. F., 1972, J. Milk food Technol.,35:670.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters.

