

## TM 2018 – BUFFERED PEPTONE WATER (6 FOLD STRENGTH PHOSPHATE BUFFER)

### INTENDED USE

A pre-enrichment medium used for increasing the recovery of injured *Salmonella* species from foods prior to selective enrichment and isolation.

### PRODUCT SUMMARY AND EXPLANATION

Buffered Peptone Water (6 fold strength phosphate buffer) is a pre-enrichment medium designed to help recovery of sublethally damaged Salmonellae before transfer to a selective medium. This pre-enrichment medium is free from inhibitors and is well buffered and provides conditions for resuscitation of the cells that have been injured by processes of food preservation.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Sodium chloride	5.000
Disodium hydrogen phosphate, 12H <sub>2</sub> O	54.000
Potassium dihydrogen phosphate	9.000

### PRINCIPLE

The media contain tryptone as a source of carbon, nitrogen, long chain amino acids, vitamins, minerals and other essential nutrients. Sodium chloride maintains the osmotic balance and phosphates buffer the medium. The broth is rich in nutrients and produces high resuscitation rates for sub-lethally injured bacteria and supports intense growth. The phosphate buffer system prevents bacterial damage due to changes in the pH of the medium.

### INSTRUCTION FOR USE

- Dissolve 45.41 grams (equivalent weight of dehydrated medium per litre) in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

### QUALITY CONTROL SPECIFICATIONS

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

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery	Incubation Temperature	Incubation Period

<i>Salmonella</i> Enteritidis	13076	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours
<i>Salmonella</i> Typhi	6539	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours
<i>Salmonella</i> Typhimurium	14028	50-100	Good-luxuriant	>=50%	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. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
2. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
3. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
4. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition 6. Salfinger Y., and Tortorello M.L. 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 49163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

**\*For Lab Use Only**  
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