

BacterLab Division



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## Bagged Medium

### BacterBag™ Buffered Peptone Water (BPW)

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The non-selective enrichment medium is used in the pre-enrichment step of the *Salmonella* testing process.

Code: 10001



## 1. PURPOSE OF USE

**BacterBag™ Buffered Peptone Water (BPW)** is a general-purpose diluent used for various activities and standards, including sample preparation, preparation of stock suspensions, and serial dilutions. It is also used for the pre-enrichment of *Salmonella* by allowing the recovery of microorganisms subjected to sublethal processing methods, such as spray drying, pasteurization, preservative actions, high osmotic pressure, and high acidity. Additionally, it is used as a suspension and recovery medium for the quantification of *Listeria monocytogenes*.

## 2. PRINCIPLE

**BacterBag™ Buffered Peptone Water (BPW)** Peptone, serving as a source of carbon, nitrogen, and vitamins essential for bacterial growth and development. Disodium phosphate, anhydrous, and Monopotassium phosphate to prevent bacterial damage caused by pH fluctuations in the medium. Chloride, which creates a saline environment to maintain the internal and external pH balance of bacteria.

### Basic Composition:

For 1L of medium (reference):

Peptone	10,0 g
Sodium Chloride	5,0 g
Disodium phosphate, anhydrous,	3,57 g
Monopotassium phosphate, anhydrous ,	1,5 g

**pH of the complete medium at 25°C: 7,0 ± 0,2**

## 3. MEDIUM PREPARATION

- The medium bags are pre-prepared and require no further formulation.

## 4. INSTRUCTIONS FOR USE

### 4.1. Preparation of stock solution:

- Add 10 or 25g of the product to be analyzed into a volumetric flask containing 90 or 225mL of **BacterBag™ Buffered Peptone Water (BPW)**.
- Homogenize thoroughly using an appropriate homogenizer.
- Specifically for *Salmonella* or *Enterobacteria* enrichment, incubate while strictly following the appropriate analysis procedure.

### 4.2. Preparation of serial dilutions:

- Add 1 mL of the stock suspension to a tube containing 9 mL of **BacterBag™ Buffered Peptone Water (BPW)**.
- Mix thoroughly.
- Repeat as necessary to achieve the desired dilution level.

## 5. RESULT INTERPRETATION

- This medium is used for the recovery and enrichment of bacteria present in the sample. Thus, secondary culturing in other selective media is necessary for bacterial identification.

## 6. QUALITY CONTROL

**BacterLab** ensures the quality of each product batch by testing with ATCC reference strains.

Reference strains	Incubation conditions	Expected results
<i>S. Typhimurium</i> ATCC 14028	18 – 24 hours at 35 – 37°C	Good growth
<i>E. coli</i> ATCC 25922		Good growth
<i>S. aureus</i> ATCC 25923		Good growth

## 7. STORAGE AND TRANSPORT CONDITIONS

- Storage: 8 – 25°C.
- Transportation: Ambient temperature.

## 8. PACKAGING

- Packaging: 5 liter/ bag or as per customer requirements.

## 9. SHELF LIFE

- Expiration Date: 6 months from the date of manufacture.

## 10. REFERENCES

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