

Prepared Culture Media Instructions for Use

NEUTRALIZING BUFFERED PEPTONE WATER (B610-25)

400ml Gamma Irradiated Prepared nBPW

USE: Neutralizing Buffered Peptone Water is used as a preenrichment medium for the isolation of *Salmonella* sp. from food products, particularly injured microorganisms.

DESCRIPTION: Carry-over of common industrial antimicrobial interventions may affect the survival and detection of pathogenic *Salmonellae* in standard Buffered Peptone Water. A neutralizing buffer formulation was developed by the USDA Agricultural Research Service with the capability of neutralizing specific antimicrobial interventions. Pre-enrichment with Neutralizing Buffered Peptone Water results in repair of compromised microorganisms by maintaining a high pH for 24 hours.⁽³⁾

FORMULA:

Buffered Peptone Water (BPW)	20.0 g/L
Sodium Bicarbonate	12.5 g/L
Lecithin	7.0 g/L
Sodium Thiosulfate	1.0 g/L
Total	40.5 g/L
Note: Medium may be adjusted and/or supplemented as	required to

meet performance criteria.

Final pH: 7.7 ± 0.5 at 25°C

PHYSICAL APPEARANCE:

Prepared Appearance – Vials are composed of clear plastic. The enclosed prepared nBPW is Opaque, cloudy, and light yellow to beige in color.

PROCEDURE: The media may settle over time in the vials. Mix completely with repeated stirring or agitation. Once completely mixed and homogenous, the medium is ready for testing applications.

Consult USDA FSIS reference methods for complete procedures.

EXPECTED RESULTS: Cultural response after 18-24 hours in aerobic atmosphere at 37°C (*Incubated in microaerobic atmosphere at 42°C for 24-48 hours).

Microorganism	CFU	Growth
E. coli ATCC™ 25922	10 - 10 ²	+
S. enterica ser. Typhimurium ATCC™ 14028	10 - 10 ²	+
S. enterica ser. Enteritidis ATCC™ 13076	10 - 10 ²	+
C. jejuni* ATCC™ 33291	10 - 10 ²	+

STORAGE: Store the prepared nBPW at 2-8°C in a dry environment for up to the expiration date.

LIMITATIONS: This product is not intended to be used for the diagnosis of human disease. nBPW is a non-selective medium which may cause overgrowth of competing flora in the test sample to affect recovery of *Salmonellae*.

The media can be left out to reach room temperature (2-25 $^{\circ}$ C) before using, however extended storage at higher temperatures may decrease shelf life.

FOR LABORATORY USE ONLY.

SIZES AVAILABLE: 25mL vials

PACKAGING: 40 vials per box Preferable shipping method is palletized Freight.

REFERENCES:

- FDA BAM, 8th Edition, Revision A, 1998. Updated and revised: 29-DEC-2000.
- 2. Bull. WHO, 48:167-174, 1973.
- 3. J. Food Technol., 12:85-91, 1977.
- 4. USDA-FSIS. June 8, 2016. FSIS Notice 41-16. Washington D.C.