

Buffered Peptone Water (BPW)

For the preliminary, non-selective enrichment of bacteria, particularly pathogenic Enterobacteriaceae, from foodstuffs and other materials.

This culture media complies with the recommendations of the International Standard Organisation ISO (ISO 6579-2002). Horizontal method for the detection of salmonella spp.

Mode of Action

The broth is rich in nutrients and produces high resuscitation rates for sublethally injured bacteria and intense growth. The phosphate buffer system prevents bacterial damage due to changes in the pH of the medium.

Typical Composition (g/litre)

Peptone from casein 10.0; sodium chloride 5.0; disodium hydrogen phosphate dodecahydrate 9.0; potassium dihydrogen phosphate 1.5.

Preparation

Suspend 25.5 g/l, if desired, dispense into suitable containers, autoclave (15 min at 121 °C).

pH: 7.0 ± 0.2 at 25 °C.

The prepared broth is clear and yellowish.

Experimental Procedure and Evaluation

Inoculate the culture medium with the sample material.

Incubation: 16 - 20 hours at 37°C aerobically.

Transfer material from the resulting culture to a selective enrichment culture medium recommended by the appropriate standard.

Literature

DIN Deutsches Institut für Normung e.V.: Mikrobiologische Milchuntersuchung. Nachweis von Salmonellen. Referenzverfahren. – **DIN 10181**.

DIN Deutsches Institut für Normung e.V.: Untersuchung von Fleisch und Fleischerzeugnissen. Nachweis von Salmonellen. Referenzverfahren. – DIN10160.

International Standard Organisation: Detection of salmonellae (Reference method). International Standard ISO 6579 (2002).

International Standard Organisation: Milk and Milk Products -Detection of Salmonella spp. ISO 6785 / IDF 93 (2001)

Ordering Information

Product	Merck Cat. No.	Pack size
Buffered Peptone Water (BPW)	1.07228.0500	500 g
Buffered Peptone Water (BPW)	1.07228.5000	5 kg

Quality control

Test strains	Growth
Salmonella typhimurium ATCC 14028	good / very good
Escherichia coli ATCC 25922	good / very good
Enterococcus faecalis ATCC 33186	good / very good
Pseudomonas aeruginosa ATCC 27853	good / very good
Salmonella enteritidis ATCC 13076	good / very good