40893 Peptone Water, phosphate-buffered, Vegitone (Vegitone Peptone Water, phosphate-buffered; BPW Vegitone; Buffered Peptone Water Vegitone)

In this medium the original animal derived peptone is replaced by a plant peptone. It is a pre-enrichment medium used for increasing the recovery of injured Salmonella species from foods prior to selective enrichment and isolation. It is also recommended by ISO Committee under the specifications ISO 6579 : 1993.

Composition:

Ingredients	Grams/Litre
Proteose Peptone (vegetable)	10.0
Sodium chloride	5.0
Disodium phosphate	3.5
Monopotassium phosphate	1.5
Final pH 7.2 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Light yellow coloured, homogeneous, free flowing powder.
Colour and Clarity: Light yellow coloured, clear solution without any precipitate.

Directions:
Suspend 20 g in 1000 ml distilled water. Dispense in 50 ml amounts. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation:
Edel and Kampelmacher (1) noted that sublethal injury to Salmonellae may occur in many food preservation processes. Enriching injured cells in Lactose broth (pH 6.9) may be further detrimental to their recovery (2). Pre-enrichment in Buffered Peptone Water at 35°C for 18-24 hours results in repair of injured cells (3). Recently ISO committee has also recommended this pre-enrichment medium for the detection of Enterobacteriaceae (4).

Inoculate 10 grams specimen in 50 ml of this medium and incubate at 35°C for 18 hours. Transfer 10 ml from this medium to 100 ml of Tetrathionate Broth and incubate at 43°C for 24 - 48 hours and then subculture on selective plating media. Examine the plates for colonies of Salmonella species.

Cultural characteristics after 24 hours at 37°C

Organisms (ATCC)	Growth
Salmonella serotype Enteritidis (13076)	+++
Salmonella serotype Typhi (19430)	+++
Salmonella serotype Typhimurium (14028)	+++

References:
1. W. Edel, E.H. Kampelmacher, Bull. Wld. Hlth. Org., 48, 167 (1973)
2. R. Angelotti, "Microbiological Quality of Foods", Academic Press, New York (1963)
3. A.Y. Sadovski, J. Fd. Technol., 12, 85 (1977)
4. International Organization for Standardization (ISO), Draft ISO/DIS, 6579 (1993)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.