

Buffered Peptone Water

Catalog :HB4084-6

Buffered Peptone Water is used for pre-enrichment of *Salmonella* and *Listeria*.

Approximate Formula:

Ingredients	gm/liter
Peptic digest of animal tissue	10.0
Sodium chloride	5.0
Disodium phosphate	3.5
Monopotassium phosphate	1.5

Final pH7.2±0.2 at 25°C

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 20.0g of the medium in one liter of deionized or distilled water. Heat to completely dissolved. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes.

Principle and Interpretation:

Peptic digest of animal tissue provides carbon and nitrogen sources to meet the needs of bacterial growth. Sodium chloride can maintain the equilibrium osmotic pressure; Potassium dihydrogen phosphate and disodium hydrogen phosphate are buffer agents.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent liquid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Buffered Peptone Water must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1°C for 18-24 h.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Remarks
<i>Listeria monocytogenes</i>	ATCC 19114	10-100	Luxuriant	Turbid
<i>Salmonella typhimurium</i>	ATCC 14028	10-100	Luxuriant	Turbid
<i>Enterobacter sakazakii</i>	ATCC 29544	10-100	Luxuriant	Turbid

References:

1. Edel and Kampelmacher. 1973. Bull. W.H.O. 48:167.
2. Angelotti. 1963. Microbiological quality of foods. Academic Press, New York, N.Y.
3. Andrews, Flowers, Silliker and Bailey. 2001. In Downes and Ito (ed.), Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
4. Rose. 2001. Isolation and identification of *Salmonella* from meat, poultry and egg products. In Microbiology laboratory guidebook, 3rd ed., Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, D.C.
5. International Organization for Standards (ISO). Microbiology of food and animal feeding stuffs – horizontal method for the detection of *Salmonella* spp., 4th ed., ISO 6579:2002.