Product Information

Solus Buffered Peptone Water (ISO) pH 7.0 (MED017)

Description

Buffered Peptone Water (ISO), pH 7.0 is used for the non-selective pre-enrichment of *Salmonella* spp. From food and for a diluent used for food and water sample testing in a laboratory setting. Buffered Peptone Water (ISO), pH 7.0 is not intended for use in the diagnosis of disease or other conditions in humans.

Peptone is the nitrogen, carbon, vitamin, and mineral sources in Buffered Peptone Water (ISO), pH 7.0. Sodium Chloride maintains the osmotic balance. Disodium Phosphate and Monopotassium Phosphate are the buffering agents in this medium.

Formula / Litre

Peptone	10.0 g
Sodium Chloride	5.0 g
Disodium Phosphate	3.5 g†
Monopotassium Phosphate	1.5 g

† Equivalent to 9.0 g of disodium hydrogen phosphate dodecahydrate
Final pH: 7.0 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

Method for reconstitution

1. Dissolve 20 g of the medium in one litre of purified water.
2. Heat with frequent agitation to completely dissolve the medium, if necessary.
3. Autoclave at 121°C for 15 minutes.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing, and off white to light beige.

Prepared Appearance: Prepared medium is clear with no to light precipitate, pale to light yellow.

Expected Cultural Response: Cultural response in Buffered Peptone Water (ISO), pH 7.0 incubated aerobically at 35 ± 2°C and examined for growth after 18 - 24 hours incubation when used as a pre- enrichment for *Salmonellae* and *Enterobacteriaceae*. When used as a diluent; the inoculum must remain within plus or minus 30% of the starting inoculum after standing for a specified time and temperature.

MICROORGANISM	ATCC	APPROX. INOCULUM (CFU)	EXPECTED RESULTS	ACTUAL RESULTS
Pre-enrichment for *Salmonella* and *Enterobacteriaecae*				
Escherichia coli	25922	10-300	Growth	
Salmonella choleraesuis	13076	10-300	Growth	
Salmonella typhi	19430	10-300	Growth	
Salmonella typhimurium	14028	10-300	Growth	
Diluent for enumeration of microorganisms and *L. monocytogenes*				
Escherichia coli	8739	10^4	T1 plate counts w/in ± 30% of counts for T0	
Staphylococcus aureus	25923	10^4	T1 plate counts w/in ± 30% of counts for T0	
Listeria monocytogenes	13932	10^4	T1 plate counts w/in ± 30% of counts for T0	

The organisms listed are the minimum that should be used for quality control testing.

Storage

Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. Edel, W., and E. H. Kampelmacher. 1973. Bull World Hlth. Org. 48:167-174.
2. Angelotti, R. 1963. Microbiological quality of foods. Academic Press, New York.
3. Sadovski, A. Y. 1977. J. Food Technol. 12:85-91.
4. International Organization for Standardization (ISO). ISO/TS 11133-2014, ICS: 07.100.30, Food Microbiology, 1211 Geneva 20, Switzerland.
5. British Standards Institute (BSI). 2002. BS EN ISO 6579: incorporating Corrigendum No. 1. Microbiology of food and animal feeding stuffs – horizontal method for the detection of Salmonella spp. London: BSI.

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