Technical Data

Buffered Sodium Chloride Peptone Solution pH 7.0

LQ123C

For the preparation of test suspension in accordance with harmonized methods of USP, EP, BP & JP.

Composition**

Ingredients	Gms / Litre
Peptone	1.000
Potassium dihydrogen phosphate	3.60
Disodium hydrogen phosphate	7.230
Sodium chloride	4.300

**Formula adjusted, standardized to suit performance parameters

Directions

Label the ready to use LQ123C bottle. Inoculate the sample and Incubate at specified temperature and time.

Principle And Interpretation

The composition of this medium is as per USP (1) and is in accordance with the harmonized methodology of USP/EP/ BP/JP (1,2,3,4). This medium is recommended for preparation of stable test strain suspension employed for validating the microbiological testing procedures of non-sterile products. The standardized stable suspensions are used so that the suitability of this test to detect microorganism in presence of product can be established. Non-fatty products insoluble in water and water-soluble products are diluted/dissolved using this solution. Peptone (meat or casein) serves as nutrient source and maintains the cell viability. Phosphates in the medium act as good buffering agents. Sodium chloride maintains the osmotic balance and cell integrity. Polysorbates reduce surface tension and also inactivate phenolic compound, if present in the test sample. Edel and Kampelmacher (6) noted that sub lethal injury to Salmonellae might occur in many food preservation processes. Pre-enrichment in Buffered Sodium chloride-Peptone solution pH 7.0 (LQ123C) at 35°C for 18-24 hours results in repair of injured cells (5). This medium supports the repair of injured cells that have sensitivity to low pH. It is also recommended for pre-enrichment and repair of injured cells (5).

Quality Control

Appearance
Sterile clear Buffered Sodium Chloride Peptone Solution in bottle.

Colour
Colourless solution.

Quantity of medium

100 ml of medium in bottle

pH
7.00- 7.00

Growth Promotion Test
In accordance with the harmonized method of USP/EP/BP/JP.

Cultural response
Cultural characteristics observed after an incubation at 30-35°C for 18-24 hours.

Sterility test
Passes release criteria

Organism	Inoculum (CFU)	Growth
Candida albicans ATCC 2091	50 -100	luxuriant
Pseudomonas aeruginosa ATCC 9027	50 -100	luxuriant
Candida albicans ATCC10231	50 -100	luxuriant
Escherichia coli ATCC 25922	50 -100	luxuriant
Escherichia coli ATCC 8739	50 -100	luxuriant
Escherichia coli NCTC 9002	50 -100	luxuriant
Salmonella Abony NCTC 6017	50 -100	luxuriant
Salmonella Typhimurium ATCC 14028	50 -100	luxuriant
Bacillus subtilis ATCC 6633	50 -100	luxuriant
Staphylococcus aureus ATCC25923	50 -100	luxuriant
Staphylococcus aureus ATCC 6538	50 -100	luxuriant
Pseudomonas aeruginosa ATCC 27853	50 -100	luxuriant

Storage and Shelf Life

Store between 2-8°C. Use before expiry date on the label.

Reference

1.The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention. Rockville, MD. 2.British Pharmacopoeia, 2011, The Stationery office British Pharmacopoeia 3.European Pharmacopoeia, 2011, European Dept. for the quality of Medicines. 4.Japanese Pharmacopoeia, 2008. 5.Sadovski A.Y., 1977, J. Fd. Technol., 12:85. 6.Edel W. & Kampelmacher E.H.,1973, Bull, Wld. Hlth. Org., 48:167.

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