

## Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% Polysorbate 80

### Intended Use

Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% polysorbate 80 is used for dissolving, suspending and diluting test samples.

### Summary

Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% Polysorbate 80 is used to make stable test strain suspensions of organisms for testing growth promoting and inhibitory properties of media when examining non-sterile pharmaceutical products for specified microorganisms. The standardized stable suspensions are used so that the suitability of this test to detect microorganism in presence of product can be established. This fluid provides osmotic stability, a stable pH value and maintains the viability of microorganisms during preparation of samples. Non-fatty products insoluble in water and water-soluble products are diluted / dissolved using this solution.

### Principle

Peptone (carrageenan or casein) serves as nutrient source and maintains the cell viability. Phosphates are the buffering agents in the solution. Sodium chloride maintains the osmotic balance and cell integrity. Polysorbates reduce surface tension and also activate phenolic compound, if present in the test sample.

### Formula\*

Ingredients	g/L
Peptone (Carrageenan and Casein)	1.0
Sodium Chloride	4.3
Disodium Hydrogen Phosphate Dihydrate	7.2
Potassium Dihydrogen Phosphate	3.6
Polysorbate 80	0.1%
Final pH (at 25°C)	7.0 ± 0.2

\*Adjusted to suit performance parameters.

#Equivalent to Meat Peptone

### Directions

1. Bring the Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% Polysorbate 80 vial/bottle to the room temperature 22°C-30°C.
2. Use Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% Polysorbate 80 as per required application.

### Quality Control

**Appearance:** Colourless, slightly opalescent solution.

**Cultural Response:** Cultural characteristics is observed after recovery on Soyabean Casein Digest Agar, (incubated at 30°C-35°C for 18-24 hours) for bacteria and on Sabouraud Dextrose Agar (at 20°C-25°C for 48-72 hours) for fungal growth.

Organism (ATCC)	% Survival after 2 hours (Stored at 18°C-22°C)	% Survival after 24 hours (Stored at 2°C-8°C)
<i>Escherichia coli</i> (8739)	≥100%	≥100%
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538)	≥100%	≥100%
<i>Pseudomonas aeruginosa</i> (9027)	≥100%	≥100%
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	≥100%	≥100%
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Abony</i> (6017)	≥100%	≥100%
<i>Bacillus spizizenii</i> (6633)	≥100%	≥100%
<i>Candida albicans</i> 3147 (10231)	≥100%	≥100%
<i>Aspergillus brasiliensis</i> WLRI 034 (120) (16404)	≥100%	≥100%

**Note:** Inoculum cfu is 100-1000.

### Storage and Stability

1. Store the ready to use Buffered Sodium Chloride-Peptone Solution pH 7.0 with 0.1% Polysorbate 80 at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

### Limitations

This medium contains less nutrients and is not recommended for the growth of microorganisms.

### Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

### References

1. The United States Pharmacopoeia, 2018, The United States Pharmacopoeial Convention. Rockville, MD.
2. British Pharmacopoeia, 2017 The Stationery office British Pharmacopoeia.
3. European Pharmacopoeia, 2016, European Dept. for the quality of Medicines.
4. Japanese Pharmacopoeia, 2014.
5. Indian Pharmacopoeia, 2018, Govt. of India, the controller of Publication, Delhi, India.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat. No.	Product Description	Pack Size
203020520010	Ready Prepared Tube	25 x 10 mL
203020520100	Bottle Media	100 mL
203020520090	Bottle Media	90 mL

 Temperature Limit	 Manufacturer	 Batch Code	 Date of Manufacture
 Catalogue Number	 Consult Instructions for use	 Use-by Date	 This way up

Revision: 0825/VER-03

### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.