

## Alkaline Peptone Water

### Intended Use

Alkaline Peptone Water is recommended as an enrichment broth for isolating *Vibrio cholerae* from clinical samples and non-clinical samples.

### Summary

This medium is recommended by APHA for enrichment of *Vibrio* species from seafood, infectious materials and other clinical specimens such as faeces. The relatively high pH of the medium (approximately 8.4) provides a favourable environment for the growth of *Vibrio* s.

### Principle

Peptone provides amino acids and other nitrogenous substances. Sodium chloride maintains osmotic equilibrium. Growth in the medium is indicated by turbidity compared to an un-inoculated tube (control). Growth from the enrichment broth is used for plating on selective media. For biochemical identification a pure culture is recommended.

### Formula\*

Ingredients	g/L
Peptone	10.0
Sodium Chloride	10.0
Final pH (at 25°C)	8.4 ± 0.2

\*Adjusted to suit performance parameters.

### Directions

1. Bring the Alkaline Peptone Water vial to the room temperature 22°C-30°C.
2. Use Alkaline Peptone Water as per required application.

### Quality Control

**Appearance:** Light yellow coloured, clear solution without any precipitate.

**Cultural Response:** Cultural characteristics is observed after 30-35°C for 18-24 hours and subculture onto TCBS Agar and incubate subcultured plates at 30-35°C for 24-48 hours.

Organisms (ATCC)	Growth
<i>Vibrio cholerae</i> (15748)	Good
<i>Vibrio parahaemolyticus</i> (MTCC 451)	Good

**Note:-** Tiny fibres may be observed in the solution due to intrinsic properties of the media. However, this will not have any impact on the final interpretation of the result.

**Gamma Irradiation :** The above said product is Gamma Irradiated between 23KGy - 32KGy.

### Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Ensure that the temperature of water bath is at 100°C so that the medium melts completely. Cooler water baths give rise to lumpy, uneven medium.
3. Before pouring into sterile petriplates, gently swirl the bottle to check whether the entire contents are properly mixed and melted.
4. Good laboratory practices and hazard precautions must be observed at all times.
5. After use media containers, prepared plates, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

### Storage and Stability

1. Store the ready to use Alkaline Peptone Water at 15°C-25°C, away from light.
2. Stability of Alkaline Peptone Water is as per expiry date mentioned on the label.

### Precautions / Limitations

1. Certain strains of *Vibrio* species requiring higher sodium chloride concentration may show poor growth.
2. Further recovery from this enriched broth onto selective media is required.
3. Biochemical characterization should be carried out from pure isolates for complete identification.

### 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.

### Reference

1. Gilligan, Janda, Karmali and Miller, 1992, Cumitech 12A, Laboratory Diagnosis of Bacterial Diarrhea, Coord. Ed., Nolte, American Society for Microbiology, Washington, D.C.
2. Forbes B.A., Sahm A.S., Bailey & Scotts 1998, Diagnostic Microbiology, 10<sup>th</sup> Ed., Mosby, Inc., Mo.
3. Isenberg, (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. I, American Society for Microbiology, Washington, D.C.
4. Downes F.P., Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4<sup>th</sup> Ed., APHA, Washington, D.C.
5. Cruikshank R., 1968, Medical Microbiol., 11<sup>th</sup> Ed., Livingstone Ltd., London.
6. Finegold S. M., Martin W. J., 1982, W. J. Bailey & Scotts Diagnostic Microbiol, 6<sup>th</sup> Ed., C.V. Mosby Co., St. Louis, p. 242.
7. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat No.	Product description	Pack Size
203010980010	Ready Prepared Tube	25 x 10 mL

### 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.

---