Alkaline Peptone Water

Intended Use
Alkaline Peptone Water is used for enrichment of *Vibrio* species.

Summary
Clinical materials containing small numbers of *Vibrio* species need to be inoculated into an enrichment medium prior to plating onto a selective medium, such as TCBS Agar. Alkaline Peptone Water is a suitable enrichment broth for this purpose and is recommended for isolating *Vibrio cholerae* from clinical samples and non-clinical samples (suspected food & water samples). 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 favorable environment for the growth of *Vibrio*'s.

Principle
Peptic digest of animal tissue provides carbon, nitrogen, amino acids and other nitrogenous substances essential to support bacterial growth. Sodium chloride provides sodium ions for the membrane transport and maintains osmotic equilibrium of the medium.

Formula*

Ingredients	**g/L**
Peptic digest of animal tissue	10.0
Sodium Chloride	10.0
Final pH (at 25°C)	8.4 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Clinical samples - faeces; Food samples; Water samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 20.0 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.

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

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

Organisms (ATCC)	Growth
Vibrio cholerae (15748)	Good
Vibrio parahaemolyticus (MTCC 451)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Interpretation of Result

Growth in the medium is indicated by the presence of turbidity compared to an uninoculated control.

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, 10th 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, 4thEd.,APHA, Washington, D.C.
5. Cruikshank R., 1968, Medical Microbiol., 11th Ed., Livingstone Ltd., London.
6. Finegold S. M., Martin W. J., 1982, W. J. Bailey & Scotts Diagnostic Microbiol, 6th 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
201010060100	Dehydrated Culture Media	100 g
201010060500	Dehydrated Culture Media	500 g