

Alkaline Peptone Water

Cat. 1407

For the enrichment of *Vibrio* species from food, water and clinical samples

Practical information

Applications	Categories
Enrichment	Vibrio



Principles and uses

Alkaline Peptone Water is used for the enrichment of *Vibrio cholera* and *Vibrio* species from food, water, feces and clinical studies.

This medium has been recommended by various authors to increase the recovery of *Vibrio* species in fecal materials and other samples.

Peptones provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance and encourages the growth of *Vibrio cholerae*.

It is claimed that raising the medium's pH leads the medium's alkalinity to inhibit most of the unwanted flora background, leaving the viability of the *Vibrio* species intact.

Growth in tubes is indicated by turbidity compared to an uninoculated control. Additional steps are recommended, like plating onto a selective and non-selective media for isolation and morphology, and biochemical and serological studies for identification.

Formula in g/L

Peptone	10	Proteose peptone	10
Sodium chloride	5		

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 25 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. To make a 10x-strength base suspend 250 grams instead of 25 grams.

Dispense into appropriate containers and sterilize in autoclave at 121 °C for 15 minutes.

Instructions for use

For clinical diagnosis, the type of sample is feces.

- Inoculate the tubes with fecal samples.
- Incubate in aerobic conditions at 35±2 °C for 24 hours.
- Reading and interpretation of the results.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber	8,6±0,2

Microbiological test

Incubation conditions: (37±2 °C / 24 h).

Microorganisms	Specification
Vibrio furnissi NCTC 11218	Good growth,turbidity
Vibrio cholerae ATCC 14034	Good growth,turbidity
Vibrio parahemolyticus ATCC 17802	Good growth, turbidity
Vibrio vulnificus ATCC 27562	Good growth,turbidity

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Colwell, R.R. 1996. Global climate and infectious disease: the cholera paradigm. Science 274. Kelly, M,T, F.W. Hickman-Bremer, and J.J. Frammer III.