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Product Information

43856 Alkaline Peptone Water (ISO)

Alkaline Peptone Water is used for detection of *Vibrio* species. It is also recommended by ISO Committee under the specification ISO 8914:1990.

Composition:

Ingredients	Grams/Litre
Peptic digest of animal tissue	20.0
Sodium chloride	30.0
Final pH 8.6 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :
Suspend 50 g in 1 litre distilled water. Boil to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 121°C) for 15 minutes.

Principle and Interpretation:
This Alkaline Peptone Water is a pre-enrichment medium specially suited and standardised for *Vibrio* species. Further steps like plating onto a solid medium to study morphology, biochemical and serological properties are recommended in official methods. Clinical samples like swabs and faeces can be added directly to the medium as described by Janda et al. (1). APHA, ISO AOAC and FDA recommend standard methods food and water samples (3-7). Add 10 grams of seafood to 90ml of Alkaline Peptone Water and incubare for up to 18-20 hours at 37°C. Prolonged incubation will cause the suppressed contaminating organisms to develop (9). The original formula of Alkaline Peptone Water was developed by Shread, Donovan and Lee to be used as an enrichment broth for the cultivation of *Aeromonas* species (10) and Cruickshank reported that when the pH is increased, the medium can be used to cultivate *Vibrio* species (1). Peptic digest of animal tissue provides nitrogenous, carbonaceous, and other important nutrients. The high concentration of sodium chloride promotes the growth of *Vibrio cholerae*. The relatively high pH value of the medium suppresses the accompanying microbial flora.

Cultural characteristics after 18-24 hours at 35°C.

Organisms (ATCC)	Growth
Vibrio parahaemolyticus (17802)	+++
Vibrio cholerae (15748)	+++
Vibrio vulnificus (27562)	+++
Vibrio furnissii (11218)	+++

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