

Peptone Water Medium

Catalog :HB5218-6

Peptone Water Medium is used for cultivation of non fastidious microorganisms and as a basal medium for carbohydrate fermentation studies.

Approximate Formula:

Ingredients	gm/liter
Peptone	10.0
Sodium chloride	5.0
Final pH7.2±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 15.0g of the powder in 1000ml of distilled water or deionized water. Mix thoroughly. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder. Dispense into tubes or flasks. Sterilize in an autoclave at 121 °C (15 lbs.) for 15 minutes.

Principle and Interpretation:

Peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance.

Appearance:

Peptone Water Medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent liquid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Peptone Water Medium must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1 °C for 18-24 hours.

Add 0.5 mL of Indole Reagent (Kovacs) directly to the tube and agitate. Allow tubes to stand for 5-10 minutes.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Indole production
<i>Salmonella typhimurium</i>	ATCC 14028	>10 ³	Luxuriant	-(yellow)
<i>Enterobacter aerogenes</i>	ATCC 13048	>10 ³	Luxuriant	-(yellow)
<i>E.Coli O157:H7</i>	ATCC 35150	>10 ³	Luxuriant	+(red)
<i>Escherichia coli</i>	ATCC 25922	>10 ³	Luxuriant	+(red)

References:

- 1.M.R. Pascual Anderson (1982) Técnicas para Análisis Microbiológico de Alimentos y Bebidas, CeNAN.
- 2.MacFaddin, J.F. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. p. 610-612. Williams & Wilkins, Baltimore, M.D.
- 3.Finegold, S.M., and W. martin, 1982. Bailey and Scott's diagnostic microbiology, 6th ed. St. Louis.