

Peptone Water (Tryptone Water) ISO

Cat. 1403

For the detection of indole production by microorganisms.

Practical information

Applications	Categories
Detection	Enterobacteria

Regulations: ISO 7251



Principles and uses

Peptone Water (Tryptone Water) is recommended for the detection of Enterobacteriaceae, in particular of *E. coli*, in water and food samples based on indole production.

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

This medium is a good substrate for the production of indole because of its high content of tryptophan. The ability of certain organisms to break down the amino acid tryptophan with indole formation is an important property which is used for the classification and identification of bacteria.

Formula in g/L

Sodium chloride	5	Tryptone	10
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Preparation

Suspend 15 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. 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 bacteria isolated from clinical samples.

- Inoculate the tubes.
- Incubate in aerobic conditions at 35±2 °C for 24 hours.
- Add 3 or 4 drops of Kovacs reagent (Cat. 5205).

For the indole test, add 3 to 4 drops of Kovacs's Reagent (Cat. 5205) and shake the tube gently. The appearance of a red or pink color in the reagent layer is a positive indication of indole. Compare the results with a non-inoculated test tube.

This medium is recommended by CeNAN (National Center for Food and Nutrition).

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Slightly toasted	Amber	7,3±0,2

Microbiological test

Incubation conditions: (35±2 °C / 18-24 h).

Microorganisms	Specification	Characteristic reaction
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Salmonella typhimurium ATCC 14028	Good growth	Indol (-)
Escherichia coli ATCC 25922	Good growth	Indol (+)
Staphylococcus aureus ATCC 25923	Good growth	Indol (-)

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

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Finegold, S.M., and W. martin, 1982. Bailey and Scott's diagnostic microbiology, 6th ed. St. Louis.