PEPTONE WATER (TRYPTONE WATER)

CAT Nº: 1403

For the detection of indole production by microorganisms

FORMULA IN g/l

Tryptone	10.00	Sodium Chloride	5.00

Final pH 7.2 ± 0.2 at 25ºC

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. The prepared medium should be stored at 2-8°C. The color is amber.

The dehydrated medium should be homogeneous, free-flowing and white cream to slightly toasted in color. If there are any physical changes, discard the medium.

USES

PEPTONE WATER (TRYPTONE WATER) is recommended for the detection of Enterobacteriaceae, in particularly 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 aminoacid tryptophan with indole formation is an important property which is used for the classification and identification of bacteria.

Inoculate and incubate at 35 ± 2ºC for 18-24 hours.

For the indole test, add 3 to 4 drops of Kovac's Reagent (Cat. 5205) and shake the tube gently. The appearance of a red r 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).

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35 2 C and observed after 18 - 24 hours.

Microorganismos	Growth	Indol
Escherichia coli ATCC 25922	Bueno	+
Salmonella typhimurium ATCC 14028	Bueno	-
Staphylococcus aureus ATCC 25923	Bueno	-

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According to ISO 11133 :

Microorganisms	International Standard	Incubation	Methods of control	Criteria
Escherichia coli ATCC 25922	ISO 6887	45 min – 1 h 20-ºC to 25ºC	Quantitative	± 30% colonies
Escherichia coli ATCC 8739	ISO 6887	45 min – 1 h 20-ºC to 25ºC	Quantitative	± 30% colonies
Staphylococcus aureus ATCC 25923	ISO 6887	45 min – 1 h 20-ºC to 25ºC	Quantitative	± 30% colonies
Listeria monocytogenes ATCC 13932	ISO 11290-2	1 h ± 5 min / 20 ± 2ºC	Quantitative	± 30% colonies
Listeria monocytogenes ATCC 35152	ISO 11290-2	1 h ± 5 min / 20 ± 2ºC	Quantitative	± 30% colonies
Salmonella thyphimurium ATCC 14028	ISO 6579/ ISO 21528-1	18 ± 2 h/ 37 ± 1ºC	Qualitative	Turbidity
Salmonella enteriditidis ATCC 13076	ISO 6579	18 ± 2 h/ 37 ± 1ºC	Qualitative	Turbidity
Escherichia coli ATCC 25922	ISO 21528-1	18 ± 2 h/ 37 ± 1ºC	Qualitative	Turbidity
Escherichia coli ATCC 8739	ISO 21528-1	18 ± 2 h/ 37 ± 1ºC	Qualitative	Turbidity

Reference media TSA Agar

BIBLIOGRAPHY

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

CE IVD

STORAGE

Once opened keep powdered medium closed to avoid hydration.



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