Nutrient Broth

Cat. 1216

For the cultivation of non-fastidious microorganisms in water, feces and other materials.

Practical information

Aplications	Categories
Growth	Mesophilic aerobic

Industry: Water / Clinical / Food

CE
IVD

Principles and uses

Nutrient Broth is used for the general cultivation of a wide variety of microorganisms that are not very nutritionally demanding.

This medium is used in accordance with the official recommended procedures for the bacteriological analyses of water, milk, dairy products and feces of clinical samples, and as a base to prepare media supplemented with other nutrients. It is formulated according to the recommendations of the American Public Health Association (APHA) and AOAC international.

Nutrient Broth is used in many laboratory procedures as it is or with added indicators, carbohydrates, organic liquids, salts, etc. It is the ideal medium for the subculture of bacteria, with a view to performing biochemical tests.

Gelatin peptone and beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth.

Formula in g/L

Gelatin peptone	5	Beef extract	3

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

Preparation

Suspend 8 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 types of samples are especially feces.

- Inoculate the medium tubes with the sample of microorganisms at 35±2 °C.
- Incubate the tubes with loose caps for 18-48 hours.
- Reading and interpretation of the results.

» For other uses not covered by the CE marking:

- Inoculate Nutrient Broth with the test microoorganism.
- Incubate for 24-48 hors at 35±2 ºC.
- Observe for growth evidenced by turbidity un the medium.
- Subcultures can be made to plate media for isolation and identification purposes.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fone ppowder	Beige	Amber, slightly opalescent	6,8 ± 0,2

Microbiological test

Incubation conditions: (35±2ºC) and (18-48 h)

Microorganisms	Specification
Klebsiella aerogenes ATCC 13048	Good growth
Staphylococcus epidermidis ATCC 14990	Good growth
Streptococcus pyogenes ATCC 19615	Moderate
Escherichia coli ATCC 25922	Good growth
Salmonella typhi ATCC 6539	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

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American Public Health Association. 1917. Standard Methods of Water Analysis. 3 Ed. APHA, Washington, D.C.