NUTRIENT BROTH TM 350

INTENDED USE
For general cultivation of less fastidious microorganisms, can be enriched with blood.

COMPOSITION

Ingredients	Gms/Ltr
Peptic digest of animal tissue	5.000
Sodium chloride	5.000
Beef extract	1.500
Yeast extract	1.500

PRODUCT SUMMARY AND EXPLAINATION

Nutrient broth is a basic culture media used for maintaining microorganisms, cultivating fastidious organisms by enriching with serum or blood and are also used for purity checking prior to biochemical or serological testing. Nutrient Broth has the formula originally designed for use in the Standard Method for Examination of Water and Waste water. It is one of the several non-selective media useful in routine cultivation of microorganisms. It can be used for the cultivation and enumeration of bacteria which are not particularly fastidious. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms.

PRINCIPLE

Peptic digest of animal tissue, Beef extract and Yeast extract provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTIONS FOR USE

1. Dissolve 13.0 grams in 1000 ml distilled water.
2. Heat, if necessary, to dissolve the medium completely.
3. Dispense into tubes or flasks as desired.
4. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
5. Cool to 40-50°C.

QUALITY CONTROL SPECIFICATIONS

Appearance Dehydrated powder: Cream to yellow homogeneous free flowing powder
Appearance of the prepared medium: Light yellow coloured clear to slightly opalescent solution

pH (at 25°C): 7.4 ± 0.2

CULTURE RESPONSE

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	ATCC	Inoculum (CFU/ml)	Growth
Escherichia coli	25922	10^3	Good-luxuriant
Pseudomonas aeruginosa	27853	10^3	Good-luxuriant
Salmonella Typhi	6539	10^3	Good-luxuriant
Staphylococcus aureus	25923	10^3	Good-luxuriant
Streptococcus pyogenes	19615	10^3	Good-luxuriant

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

REFERENCES

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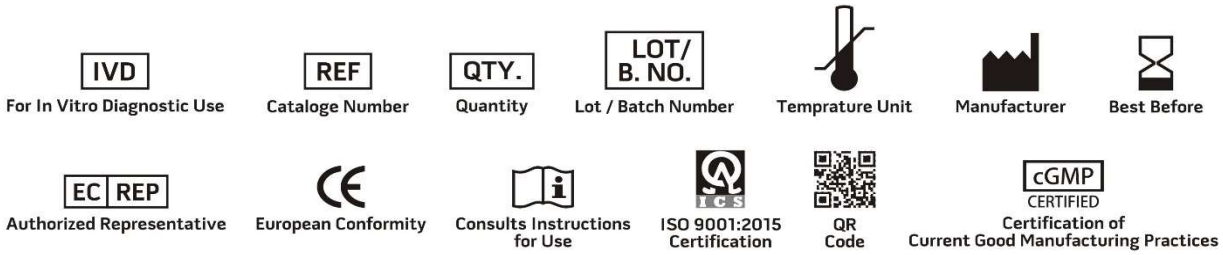
3. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
4. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
5. Marshall (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
6. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.

7. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.