

Nutrient Broth

Catalog : HB0108-500

Nutrient Broth is used for the cultivation and the enumeration of non-fastidious microorganisms in water, food, sewage, fecal and other materials.

Approximate Formula:

Ingredients	gm/liter
Peptic Digest of Animal Tissue	10.0
Beef Extract	3.0
Sodium Chloride	5.0
Final pH 7.2±0.2 at 25°C	

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

Directions:

Suspend 18.0g of the medium in one liter of distilled water or deionized water. Mix well and heat with frequent agitation. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes.

Principle and Interpretation:

Peptic digest of animal tissue and beef 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.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish 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:

Nutrient Broth 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.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Remarks
<i>Staphylococcus aureus</i>	ATCC 25923	10-100	luxuriant	Turbid
<i>Listeria monocytogenes</i>	ATCC 19114	10-100	luxuriant	Turbid
<i>Escherichia coli</i>	ATCC 25922	10-100	luxuriant	Turbid
<i>Salmonella typhimurium</i>	ATCC 14028	10-100	luxuriant	Turbid

References:

- GB4789.28-2013 People's Republic of China food safety national standard food microbiology test medium and reagent quality requirements.
- Marshall (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
- U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.
- Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.