Standard Nutrient Broth No. 1

M1224

Standard Nutrient Broth No. 1 is used for the cultivation of fastidious bacteria

Composition**

Ingredients	Gms / Litre
Peptone, special	15.000
Yeast extract	3.000
Sodium chloride	6.000
Dextrose	1.000
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 25 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Nutrient media are basic culture media used for maintaining microorganisms (1), for purity checking prior to biochemical or serological testing. The Peptone special, incorporated in this broth is an enzymatic protein digest of animal tissue especially adapted for the preparation of media for culturing fastidious bacteria. The peptone and yeast extract provides nitrogenous compounds, carbon, sulphur, trace ingredients. Sodium chloride maintains the osmotic equilibrium.

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 (2).

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Light amber coloured clear solution in tubes

Reaction
Reaction of 2.5% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH
7.30-7.70

Cultural Response
M1224: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth
Cultural Response		
Escherichia coli ATCC 25922	50-100	good-luxuriant
Erysipelothrix rhusiopathiae ATCC 19414	50-100	good-luxuriant
Listeria monocytogenes ATCC 19111	50-100	good-luxuriant
Staphylococcus aureus ATCC 25923	50-100	good-luxuriant
Streptococcus pneumoniae ATCC 6303	50-100	good-luxuriant
Streptococcus pyogenes ATCC 19615	50-100	good-luxuriant

Shigella flexneri ATCC 12022	50-100	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology , Norris J. and Ribbons D.(Eds.), Vol. 3A., Academic Press, London.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

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