17181 Nutrient Broth pH 6.9 without NaCl

Used as general purpose medium for the cultivation of microorganisms.

Composition:

Ingredients	Grams/Litre
Peptic digest of animal tissue	5.0
Beef extract	3.0
Final pH 6.9 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:
Suspend 8 g in 1 litre distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:
Nutrient Broth of pH 6.9, without NaCl is used as a general purpose medium for the cultivation of non-fastidious microorganisms. It has the formula originally developed for use in Standard Methods for the Examination of Water and Wastewater (1).
If 6.5% NaCl is added to the Nutrient Broth, it can be used to identify the Enterococci by determining the salt tolerance of bile esculin positive Streptococci (2). A positive bile esculin test and growth in 6.5% NaCl broth confirms the presence of Streptococci.
This Nutrient Broth with pH 6.9 and devoid of NaCl is a relatively simple formulation containing beef extract and peptic digest of animal tissue which can support the growth of non-fastidious microorganisms. If this medium is incorporated with 6.5% NaCl then it acts as a differential and selective agent by interfering with osmotic balance and the permeability of membrane of the majority of microorganisms.

Cultural characteristics after 18-48 hours at 35-37°C.

Organisms (ATCC)	Growth
Enterobacter aerogenes (13048)	+++
Escherichia coli (25922)	+++
Salmonella typhi (6539)	+++
Staphylococcus aureus (25923)	+++
Staphylococcus epidermidis (12228)	+++
Enterococcus faecalis (29212)	+++

References:

1. Greenberg A. E., Trussell R. R. and Clesceri L. S. (Eds.), 1985, Standard Methods for the Examination of Water and Wastewater, 16th ed., APHA, Washington, D.C.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. l, Williams and Wilkins, Baltimore.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.