04163 Nutrient Agar No 2, Vegitone (Vegitone Nutrient Agar No 2)

This Nutrient Agar contains only plant peptone instead of animal peptone. It is used for the cultivation of bacteria and for the enumeration of organisms in water, sewage, faeces and other materials.

Composition:

Ingredients	Grams/Litre
Peptone (vegetable)	5.0
Vegetable Extract	3.0
Agar	15.0

Final pH 7.0 +/- 0.2 (at 25°C)
Store below 8°C. use before expiry date on the label.
Appearance: Yellow coloured, homogeneous, free flowing powder.
Gelling: Firm.
Colour and Clarity: Yellow coloured, clear to slightly opalescent gel forms in petri plates.

Directions :
Suspend 23 g in 1000 ml distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired, the medium can be enriched with 5-10% v/v sterile defibrinated blood.

Principle and Interpretation:
Nutrient Agar is a basic culture medium used for maintenance or to check purity of subcultures prior to biochemical or serological tests from water (1) and dairy (2). Recently ISO committee has recommended Nutrient Agar, pH 7.0 for the enumeration of *Salmonella* (3). This medium may be used as slants or plates for routine work with non-fastidious organisms. Wetmore and Gochenour (4) maintained cultures of *Malleomyces* and *Pseudomonas* on Nutrient Agar to which glycerol was added. Greenberg and Cooper (5) employed this medium in cultivation of Staphylococci for the preparation of vaccines and antigens. Nutrient Agars have relatively simple formulation which provides the necessary nutrients for the growth of many microorganisms which are not very fastidious.
Vegetable Extract contains vitamins, organic nitrogen compounds, salts and little carbohydrates (6).
Peptone (vegetable) provides amino acids and long chain peptides for the organisms.

Cultural characteristics after 18-24 hours at 37°C.

Organisms (ATCC)	Growth
Escherichia coli (25922)	+++
Salmonella serotype Typhi (6539)	+++
Salmonella serotype Enteritidis (13076)	+++
Salmonella serotype Typhimurium (14028)	+++
Shigella flexneri (12022)	+++
Staphylococcus aureus (25923)	+++
Enterococcus faecalis (29212)	+++

References:
1. A.E. Greenberg, R.R. Trussell, L.S. Clesceri (Eds.), Standard Methods for the Examination of Water and Waste water, 16th ed., APHA, Washington D.C. (1985)
2. Standard Methods for the Examination of Dairy Products, 14th ed., APHA, Washington D.C. (1978)
3. International Organization for Standardization (ISO), Draft ISO/DIS 6579 (1993)
4. P. Wetmore, W. Gochenour, Comperative Studies of the Genus Malleomyces and selected Pseudomonas species I., J. Bact., 72(1), 79–89 (1956)
5. Greenberg, Cooper, Can. Med. Assn. J., 83, 143 (1960)
6. M.J. Pelczar, E.C.S. Chan, N.R. Kreig, Microbiology, 5th ed., McGraw-Hill Book Company, New York (1986)

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.