41960 Vegitone Infusion Broth (Brain Heart Broth, Vegitone)

Vegitone Infusion Broth is like Brain Heat Infusion Broth with the difference that animal peptones are replaced by plant peptones. It is highly nutritious and is employed for the propogation of fastidious pathogenic cocci and other organisms associated with blood culture work and allied pathological investigations. This medium is also used for the preparation of inocula for use in antimicrobial susceptibility tests. It is also recommended by ISO Committee under the specifications ISO 6888:1983 for enrichment of *Staphylococcus aureus*.

Composition:

Ingredients	Grams/Litre
Peptone (vegetable)	10.0
Vegetable Special Infusion powder	12.5
Vegetable Infusion powder	5.0
Dextrose	2.0
Sodium chloride	5.0
Disodium phosphate	2.5
Final pH 7.4 +/- 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.

Appearance: Yellow coloured, homogeneous, free flowing powder.
Colour and Clarity: Light amber coloured, clear to slightly opalescent solution.

Directions:
Suspend 37 g in 1000 ml distilled water. Dispense into bottles or tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. For best results, the medium should be used on the day it is prepared, otherwise, it should be place in a boiling water bath or steamed for few minutes to remove the absorded oxygen. It should be cooled rapidly without shaking just before use to minimise absorbtion of oxygen by medium.

Principle and Interpretation:
Rosenow (1) devised the original medium by adding brain tissue to dextrose broth. This medium is nutritious and well buffered to support the growth of wide variety of microorganisms (2,3,4). Recently this medium is also recommended by ISO committee for the detection of *Staphylococcus aureus* (5). With the additions of desired component this medium can be specifically adopted for cultivation requirements. For example, addition of 6.5% sodium chloride makes it selective for salt tolerant bacteria like Enterococci. Addition of 0.1% agar to the broth improves growth of micro-aerophilic and anaerobic microorganisms. Vegitone Infusion Agar enriched with 10% sheep blood is used for isolation and cultivation of wide variety of fungal species, including systemic fungi from clinical specimens. For selective isolation of these fungi additional gentamicin and/or chloramphenicol is recommended (6). Peptone (vegetable), Vegetable Special Infusion powder and Vegetable Infusion powder are non-animal nutritive sources of peptides and amino acids providing nitrogen for growth of microorganisms. Dextrose is the fermentable carbohydrate source and sodium chloride is for the osmotic balance in the media. Disodium phosphate is used as the buffering agent.

Cultural characteristics after 18-24 hours at 35°C

Organisms (ATCC)	Growth
Neisseria meningitidis (13090)	+++
Streptococcus pneumoniae (6303)	+++
Streptococcus pyogenes (19615)	+++
Staphylococcus aureus (25923)	+++

References:

1. Rosenow, J. Dental Res., 1,205 (1919)
2. T. Roseburg et al, J. Inf. Dis., 74, 131 (1944)
3. N.F. Conant, Diagnostic Procedures and Reagents, 3rd Ed., A.P.H.A., Inc., New York, p. 452 (1950)
4. J.F. MacFaddin, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore (1985)
5. International Organization for Standardization (ISO), enumeration of Staphylococcus aureus, Draft ISO/DIS 6880 (1983)
6. Lennette, Bolows, Housler and Shadomy (ed), Manual of Clinical Microbiology, ASM, Washington, D.C. (1985)

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.