TMV 362 – BRAIN HEART INFUSION BROTH (VEG.)

INTENDED USE
For cultivation of fastidious microorganisms associated with blood culture.

PRODUCT SUMMARY AND EXPLANATION
These media are prepared by completely replacing animal based peptone with vegetable peptone making the media free of BSE / TSE risks. Rosenow devised the original medium by adding brain tissue to dextrose broth. These media like the conventional media are nutritious and well buffered to support the growth of wide variety of microorganisms. With the addition of 10% defibrinated sheep blood, it is useful for isolation and cultivation of *Histoplasma capsulatum* and other fungi. In the formulation containing 6.5% sodium chloride, the salt acts as a differential and/or selective agent by interfering with membrane permeability and osmotic and electrokinetic equilibria in salt intolerant organisms. The addition of 0.1% agar improves growth of microaerophilic and anaerobic microorganisms. Brain Heart Infusion Broth, Veg with addition of 1.5% agar should not be used for detection of haemolytic activity of Streptococci, since it contains dextrose, which has been reported to cause a typical haemolytic reactions when it is present in blood containing media. For selective isolation of fungi, addition of Gentamicin and/or Chloramphenicol is recommended.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone No. 3	10.000
Veg special infusion	7.500
Veg infusion	10.000
Dextrose	2.000
Sodium chloride	5.000
Disodium phosphate	2.500

PRINCIPLE
Veg peptone, veg special infusion powder and veg infusion serve as sources of carbon, nitrogen, essential growth factors, amino acids and vitamins. Dextrose serves as a source of energy. Disodium phosphate helps in maintaining the buffering action of the medium whereas sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE
- Dissolve 37.0 grams in 1000 ml purified/distilled water.
- Dispense into bottles or tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- For best results, the medium should be used on the day it is prepared, otherwise, it should be boiled or steamed for a few minutes and then cooled before use.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Yellow coloured may have slightly greenish tinge, homogeneous, free flowing powder.

Appearance of prepared medium : Light amber coloured, clear to slightly opalescent solution.

pH (at 25°C) :7.4±0.2

INTERPRETATION
Cultural characteristics observed after incubation.

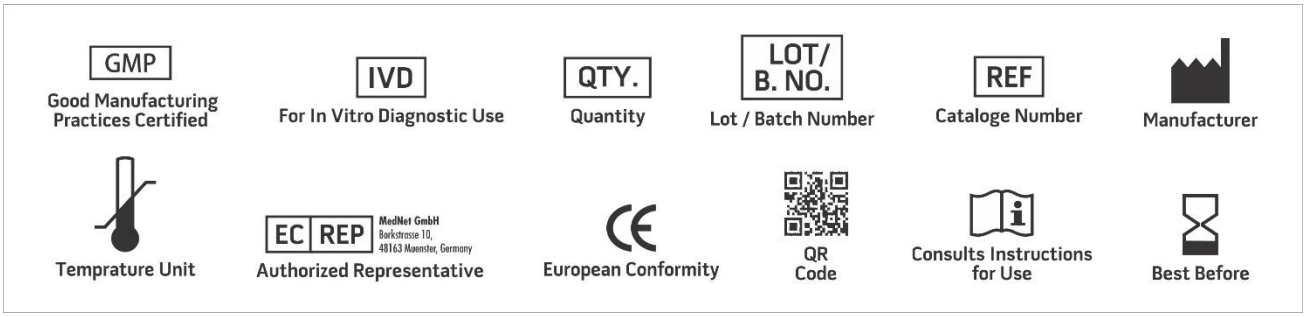
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Neisseria meningitidis	13090	50-100	Luxuriant	35-37°C	24-48 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	35-37°C	24-48 Hours

PACKAGING:
In pack size of 100 gm and 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. Rosenow, 1919, J. Dental Research, 1:205.
2. Roseburg T. et al, 1944, J. Inf. Dis., 74:131.
3. Conant N.F., 1950, Diagnostic Procedures and Reagents, 3rd ed., A.P.H.A. Inc., New York.
4. MacFaddin J.F., 1985, Media for Isolation-Cultivation-IdentificationMaintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
5. Howard B., Keiser J.F., Weissfeld A., et al, 1994, Clinical and Pathogenic Microbiology, 2nd ed., Mosby Co.
6. Murray PR., Baron, Pfaller, Tenover and Yolken (Eds.), ASM, Washington, D.C. 2003, In Manual of clinical Microbiology, 8th ed.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 08 Nov., 2019