TM 362 – BRAIN HEART INFUSION BROTH

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

PRODUCT SUMMARY AND EXPLANATION
BHI Medium is useful for cultivating a wide variety of microorganisms since it is a highly nutritive medium. It is also used to prepare the inocula for antimicrobial susceptibility testing. BHI Broth is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth. BHI Broth is also the preferred medium for anaerobic bacteria, yeasts and moulds. This medium is nutritious and well buffered to support the growth of wide variety of organisms. With the addition of 10% defibrinated sheep blood, it is useful for isolation and cultivation of *Histoplasma capsulatum* and other fungi. For selective isolation of fungi, addition of gentamicin and/or chloramphenicol is recommended.

COMPOSITION

Ingredients	Gms / Ltr
Calf brain infusion from	12.500
BHI powder	5.000
Proteose peptone	10.000
Dextrose (Glucose)	2.000
Sodium chloride	5.000
Disodium hydrogen phosphate	2.500

PRINCIPLE
Proteose peptone, Calf brain infusion powder and BHI powder 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	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light to medium amber coloured, clear solution without any precipitate.
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	Good-luxuriant	35-37°C	24-48 Hours
Streptococcus pneumoniae	6303	50-100	Good-luxuriant	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant	35-37°C	24-48 Hours
Candida albicans	10231	50-100	Good-luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good-luxuriant	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good-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
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4. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
5. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
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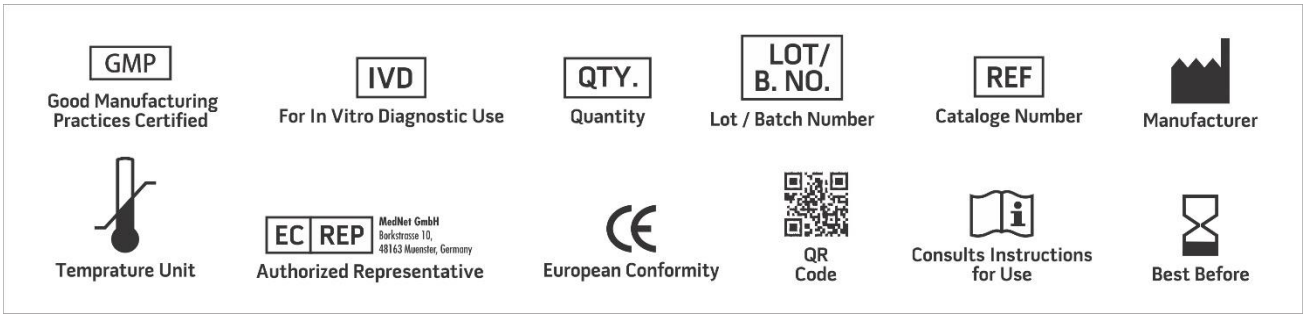

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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