TM 1992 – BHI W/ 0.1% AGAR (BRAIN HEART INFUSION W/ 0.1% AGAR)

INTENDED USE

For propagation of fastidious pathogenic cocci and other organisms associated with blood culture work and allied pathological investigations.

PRODUCT SUMMARY AND EXPLANATION

BHI Medium is useful for cultivating a wide variety of microorganisms since it is a highly nutritive medium. Brain Heart Infusion Broth is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth. Brain Heart Infusion 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. Agar in 0.1% concentration improves growth of microaerophillic and anaerobic microorganisms. For selective isolation of fungi, addition of gentamicin and/or chloramphenicol is recommended

COMPOSITION

Ingredients	Gms / Ltr
Calf brain, infusion from	12.500
Beef heart, infusion from	5.000
Proteose peptone	10.000
Sodium chloride	5.000
Disodium hydrogen phosphate	2.500
Dextrose (Glucose)	2.000
Agar	1.000

PRINCIPLE

Proteose peptone, Calf brain, infusion from and BHI Powder serve as sources of carbon, nitrogen, essential growth factors, amino acids and vitamins. Dextrose serves as a source of energy. Disodium hydrogen phosphate helps in maintaining the buffering action of the medium whereas sodium chloride maintains the osmotic equilibrium of the medium. Agar in 0.1% concentration helps create appropriate conditions for growth of anaerobic bacteria.

INSTRUCTION FOR USE

- Dissolve 38.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- For best results the medium should be used on the same 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 light 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	Recovery	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Neisseria meningitidis	13090	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Streptococcus pneumoniae	6303	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good-luxuriant	>=50%	35-37°C	24-48 Hours

PACKAGING:
In pack size of 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.

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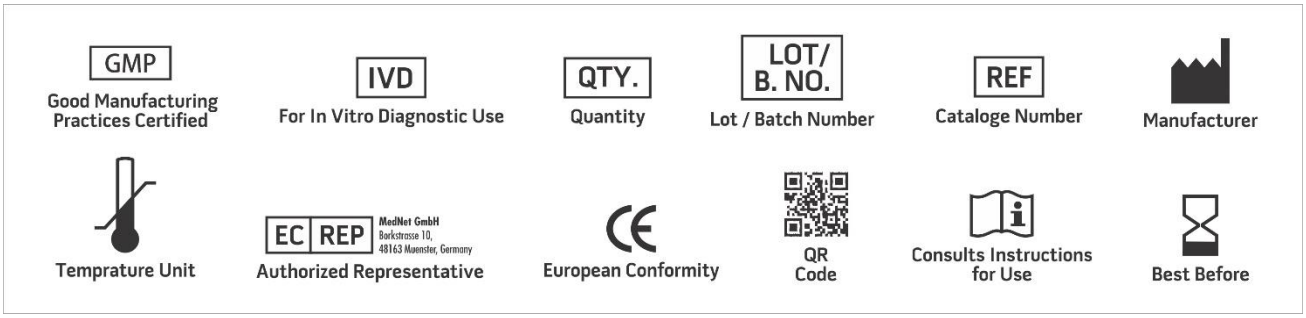

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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