

CM 20243 – 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

BHIMedium 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 microaerophilic 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 38.0grams 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.




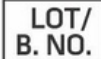








DISPOSAL

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

REFERENCES

1. Atlas R. M., 1993, Handbook of Microbiological Media, 147-153, CRC Press, Boca Raton, FL.
2. Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc., New York.
3. Howard B., Keiser J. F., Weissfeld A. et al, 1994, Clinical and Pathogenic Microbiology, 2nd Ed., Mosby Co.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
7. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
8. Rosenow, 1919, J. Dental Research, 1:205. 9. Roseburg T. et al, 1944, J. Inf. Dis., 74:131. 10. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



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|  GMP Good Manufacturing Practices Certified |  IVD For In Vitro Diagnostic Use |  QTY. Quantity |  LOT/ B. NO. Lot / Batch Number |  REF Catalogue Number |  Manufacturer |
|  Temperature Unit |  EC REP Authorized Representative <small>MedNet GmbH Birkstrasse 10, 48143 Muenster, Germany</small> |  European Conformity |  QR Code |  Consults Instructions for Use |  Best Before |

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

