# CM 20244 – BHI W/ 6.5% NaCL (BRAIN HEART INFUSION BROTH WITH 6.5 % NaCL)

## INTENDED USE

For the selective cultivation of salt tolerant microorganisms.

## PRODUCT SUMMARY AND EXPLANATION

Brain Heart Infusion Medium is usefulfor 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. BHI Broth with 6.5 % NaCl is employed for the selective cultivation of salt tolerant microorganisms. High concentration of sodium chloride acts as a differential and/or selective agent by interfering with membrane permeability and osmotic and electro kinetic equilibrium in salt intolerant organisms.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| Calf Brain Infusion from | 12.500 |
| BHI powder | 5.000 |
| Proteose peptone | 10.000 |
| Dextrose (Glucose) | 2.000 |
| Sodium chloride | 65.000 |
| Disodium hydrogen phosphate | 2.500 |

## PRINCIPLE

Proteose peptone and Calf Brain Infusion from 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.

## INSTRUCTION FOR USE

Dissolve 97.0 grams in 1000 ml purified/distilled water.
Dispense into bottles or tubes as desired 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 light yellow homogeneous free flowing powder. |
| Appearance of prepared medium | : Light amber coloured, clear solution without any precipitate. |
| pH (at 25°C) | : 7.4±0.2 |

## INTERPRETATION

Culturalcharacteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|
| Staphylococcus aureus subsp. aureus | 25923 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |
| Neisseria meningitidis | 13090 | >=$10^4$ | Inhibited | 35-37°C | 24-48 Hours |
| Streptococcus pneumoniae | 6303 | >=$10^4$ | Inhibited | 35-37°C | 24-48 Hours |
| Streptococcus pyogenes | 19615 | >=$10^4$ | Inhibited | 35-37°C | 24-48 Hours |
| Enterococcus faecalis | 29212 | 50-100 | Good-luxuriant | 35-37°C | 24-48 Hours |

## PACKAGING:

Inpacksizeof500 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.

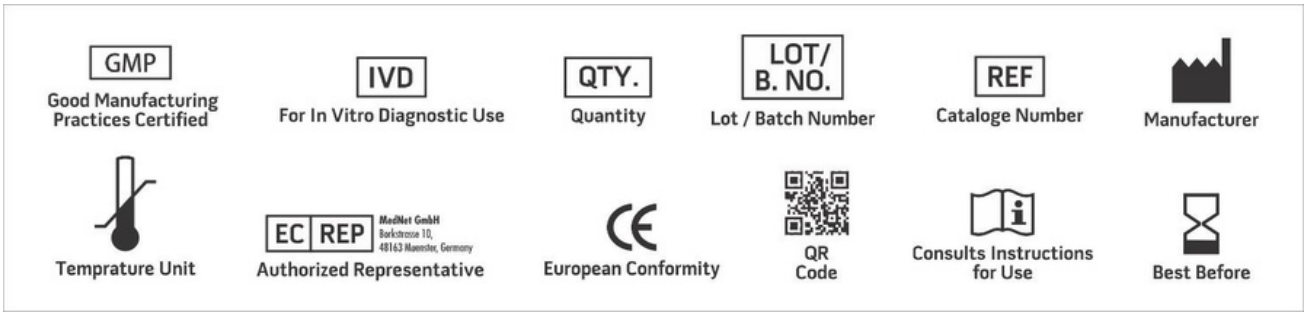
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## DISPOSAL

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

## REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
2. 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.
3. Rosenow, 1919, J. Dental Research, 1:205.
4. 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.



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

*For LabUse Only