# CM 20580 – DEY-ENGLEY NEUTRALIZING BROTH BASE

## INTENDED USE

For disinfectant testing where the neutralization of the antiseptics and disinfectants is important for determining it bactericidal activity.

## PRODUCT SUMMARY AND EXPLANATION

Dey-Engley Neutralizing Broth is formulated as per the procedure described by Engley and Dey. Dey-Engley Neutralizing Broth is especially suited for environmental sampling where neutralization of the chemical is important to determine its bactericidal activity. A strongly bacteriostatic substance inhibits the growth and reproduction of bacteria without killing them. These bacteria hold the ability to cause infection under favorable conditions.

Dey-Engley Neutralizing Broth Base a does not contain the neutralizing components. The Dey-Engley Neutralizing Broth neutralizes a broadspectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorinepreparations, mercurials, formaldehyde and glutaraldehyde. DeyEngley Neutralizing Broth is used for the neutralizationand testing of antiseptics and disinfectants according to the procedure of Engley and Dey.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| Tryptone | 5.000 |
| Yeast extract | 2.500 |
| Dextrose (Glucose) | 10.000 |
| Bromocresol purple | 0.020 |

## PRINCIPLE

The medium consists of Tryptone which provides essential nutrients. Dextrose is an energy source. Yeast extract is also a rich source of vitamin B complex. Bromocresol purple is an indicator for dextrose utilization. Therefore, bromo cresol purple and dextrose are added to the medium. Those organisms that ferment dextrose will turn the medium from purple to yellow.

## INSTRUCTION FOR USE

Dissolve 17.52grams in 1000 ml purified/distilled water.
Heat if necessary to dissolve the medium completely.
Mix well and dispense into tubes or flasks as desired.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

## QUALITY CONTROL SPECIFICATIONS

| | |
|---|---|
| Appearance of Powder | : Light yellow to bluish grey homogeneous free flowing powder. |
| Appearance of prepared medium | : Purple coloured, opalescent solution in tubes. |
| pH (at 25°C) | : 7.6 ± 0.2 |

## INTERPRETATION

Culturalcharacteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|
| Escherichia coli | 25922 | 50-100 | Luxuriant | 35-37 °C | 40-48 Hours |
| Pseudomonas aeruginosa | 27853 | 50-100 | Luxuriant | 35-37 °C | 40-48 Hours |
| Salmonella Typhimurium | 14028 | 50-100 | Luxuriant | 35-37 °C | 40-48 Hours |
| Staphylococcus aureus subsp. aureus | 25923 | 50-100 | Luxuriant | 35-37 °C | 40-48 Hours |
| Bacillus subtilis subsp. spizizenii | 6633 | 50-100 | Luxuriant | 35-37 °C | 40-48 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.

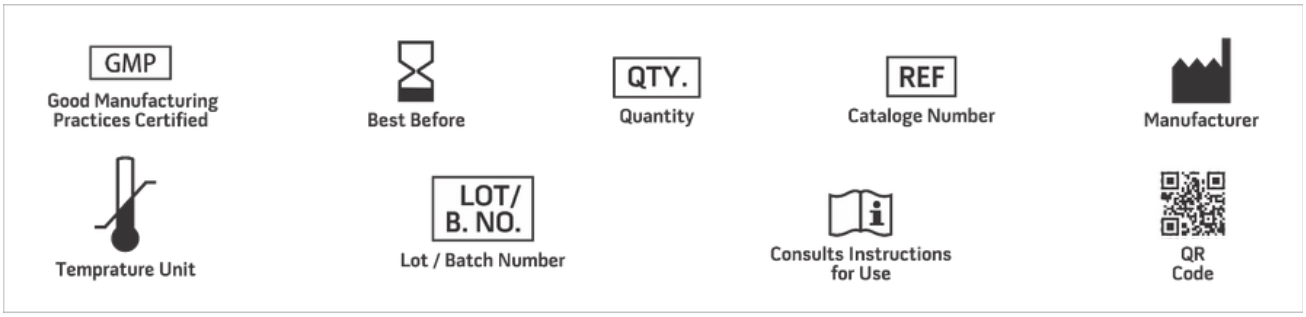
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## DISPOSAL

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

## REFERENCES

1.American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Engley and Dey, 1970. Chem. Spec. Manuf. Assoc. Proc., Mid-Year Meet., p. 100.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. 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.
6. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed.,APHA Inc., Washington, D.C.




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

*For LabUse Only