

CM 20,052 -ALKALINE PEPTONE WATER (pH 8.6) (ISO 21872-1 & 2:2007)

INTENDED USE

For detection and enrichment of Vibrio species.

PRODUCT SUMMARY AND EXPLANATION

Alkaline Peptone Water is a pre-enrichment medium specially standardized for Vibrio species. The original formula of Alkaline Peptone Water was developed by Shread, Donovan and Lee to be used as an enrichment broth for the cultivation of Aeromonas species and Cruickshank reported that when the pH is increased, the medium can be used to cultivate Vibrio species. This medium is recommended by APHA for enrichment of Vibrio species from seafood, infectious materials and other Clinical samples like swabs and faeces in food and water samples can be added directly to the medium. A slight modification of this medium has recently been approved by the ISO Committee for detection of Vibrio species.

COMPOSITION

| Ingredients | Gms / Ltr |
|--------------------------------|-----------|
| Sodium chloride | 30.000 |
| Peptic digest of animal tissue | 20.000 |

PRINCIPLE

The peptic digest of animal tissue makes this media nutritious by providing amino acids and other nitrogenous substances for the growth of microorganisms. Sodium chloride maintains the osmotic balance.

INSTRUCTION FOR USE

- Dissolve 50 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense in tubes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C before use.

QUALITY CONTROL SPECIFICATIONS

| | | |
|---------------------------------|---|---|
| Appearance of Dehydrated powder | : | Cream to yellow colour, Homogeneous free flowing powder |
| Appearance of Prepared medium | : | Light yellow colour, clear solution without any precipitate |
| pH (at 25°C) | : | 8.6± 0.2 |

INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Recovery | Incubation Temperature | Incubation Period |
|-------------------------|-------|-------------------|-----------|----------|------------------------|-------------------|
| Vibrio cholerae | 15748 | 50-100 | Luxuriant | ≥70% | 35 - 37°C | 18 – 24 Hours |
| Vibrio parahaemolyticus | 17802 | 50-100 | Luxuriant | ≥70% | 35 - 37°C | 18 – 24 Hours |

PACKAGING

In 500g packaging size.



STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

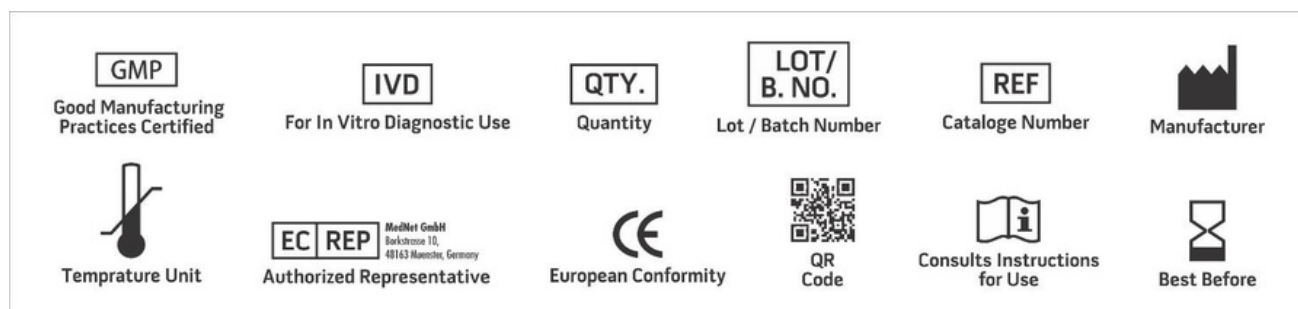
Product Deterioration: Do not use, if powder shows evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

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2. Forbes B. A., Sahm A. S., and Weissfeld D. F., Bailey & Scotts Diagnostic Microbiology, 10th Ed., 1998, Mosby, Inc., St. Louis, Mo.
3. Isenberg, (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. I, American Society for Microbiology, Washington, D.C.
4. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
5. Cruickshank R., 1968, Medical Microbiol., 11th Ed., Livingstone Ltd., London.
6. International Organization for Standardization (ISO), 1990, Draft ISO/DIS 8914.
7. Finegold S. M. and Martin W. J., 1982, W. J. Bailey and Scotts Diagnostic Microbiol, 6th Ed., C.V. Mosby Co., St. Louis, p. 242.
8. R. Cruickshank, Medical Microbiol., 11th ed., Livingstone Ltd., London (1968).
9. P. Shread, T.J. Donovan, J.V. Lee, Soc. Gen. Microbiol., Q. 8, 184 (1991).



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

*For Lab Use Only