

CM 21,359 – PEPTONE WATER W/ PHENOL RED

INTENDED USE

For studying fermentation ability of *Yersinia enterocolitica*.

PRODUCT SUMMARY AND EXPLANATION

Peptone Water with Phenol Red is recommended for studying the ability of an organism to ferment a specific carbohydrate which aid in differentiation of genera and species. The formulation of Peptone Water makes it useful for cultivating non-fastidious organisms. This medium is recommended to study fermentation reactions of *Yersinia enterocolitica*. Peptone Water with pH adjusted to 8.4 is suitable for the cultivation and enrichment of *Vibrio* species. Peptone Water is particularly suitable as a substrate in the study of indole production. Peptone used in Peptone Water is rich in tryptophan content. Peptone Water is also utilized as a base for carbohydrate fermentation studies with the addition of sugar and indicators such as bromocresol purple, phenol red or bromothymol blue.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Sodium chloride	5.000
Phenol red	0.020

PRINCIPLE

The medium consists of peptone which provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins provides essential nutrients. Sodium chloride maintains the osmotic balance of the medium.

INSTRUCTION FOR USE

Dissolve 15.02 grams in 1000 ml distilled water.

Add the test carbohydrate in desired quantity and dissolve completely.

Dispense in tubes with or without inverted Durhams tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light pink homogeneous free flowing powder.
Appearance of prepared medium	: Red coloured clear solution without any precipitate.
pH (at 25°C)	: 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	L(+)Rhamnose (Acid)	L(+)Rhamnose (Acid)	Salicin (Acid)	Incubation Temperature	Incubation Period
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Yersinia enterocolitica	27729	50-100	Luxuriant	Positive reaction (moderate)	Positive reaction	Negative reaction	35-37°C	18-24 Hours
Yersinia pseudotuberculosis	29833	50-100	Luxuriant	Positive reaction (occasional strain are rhamnose positive)	Negative reaction	Positive reaction	35-37°C	18-24 Hours

PACKAGING:

Inpacksize 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. Finegold S. M. and Baron E. J., 1986, Bailey and Scotts Diagnostic Microbiology, 7th Ed., The C.V. Mosby Co., St. Louis.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. 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.
4. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.
5. 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.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

*For Lab Use Only

