

TM 330 – PEPTONE WATER

INTENDED USE

General purpose growth medium and used as the base of carbohydrate fermentation media.

PRODUCT SUMMARY AND EXPLANATION

Peptone Water is particularly suitable as a substrate in the study of indole production. Peptone used in Peptone Water is rich in tryptophan content. Presence of indole can be demonstrated using either Kovacs or Ehlrich reagent. 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. Peptone Water is recommended for studying the ability of an organism to ferment a specific carbohydrate which aid in differentiation of genera and species. Peptone water is formulated as per Shread, Donovan and Lee. Peptone Water with pH adjusted to 8.4 is suitable for the cultivation and enrichment of Vibrio species.

COMPOSITION

Ingredients	Gms / Ltr		
Peptone	10.000		
Sodium chloride	5.000		

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 15.0 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.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Light amber coloured clear solution without any precipitate.

pH (at 25°C) $: 7.2 \pm 0.2$

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Indole test	Incubation Temperature	Incubation Period
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	Negative reaction, no red ring at the interface of the medium on addition of Kovac's reagent	35-37°C	18-24 Hours









Escherichia coli	25922	50-100	Luxuriant	Positive reaction, red ring at the interface of the medium on addition of Kovac's reagent	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	Negative reaction, no red ring at the interface of the medium on addition of Kovac's reagent	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 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.

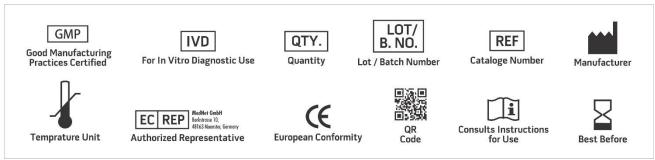
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Finegold and Baron, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.
- 2 Lennette and others (Eds.), 1985, Manual of Clinical Microbiology, 4th ed, ASM, Washington, D.C.
- 3. MacFaddin J., 1980, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.
- 4. Shread P., Donovan T.J, and Lee J.V, (1981), Soc. Gen, Microbiol. Q., 8, 184.



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

*For Lab Use Only

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