

TM 805- PEPTONE WATER

(IS: 5887 (Part I) 1976, reaffirmed 2005)

INTENDED USE

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

PRODUCT SUMMARY AND EXPLANATION

Peptone water is recommended by BIS for the detection of indole production by *Escherichia coli*. It can also be used as a basal medium for studying the fermentation reactions of different organisms against a specific carbohydrate.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Sodium chloride	5.000

PRINCIPLE

Peptic digest of animal tissue provides essential nutrients. Sodium chloride maintains the osmotic balance. To detect indole production, add 0.5 ml of Kovacs reagent to the tube and shake the tube gently. Appearance of a red colour indicates presence of indole.

INSTRUCTION FOR USE

- Dissolve 25.00 grams in 1000ml distilled water.
- Gently heat with swirling to dissolve the medium completely.
- Dispense in test tubes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool at room temperature prior to use.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder : Light yellow coloured, Homogeneous free flowing powder

Appearance of Prepared medium : Light amber coloured, clear solution

pH (at 25°C) : 7.4± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Indole production	Incubation Temperature	Incubation period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, red ring at the interface of the medium	35-37°C	24-48 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	Negative reaction, no color development / cloudy ring	35-37°C	24-48 Hours
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	Negative reaction, no colour development /	35-37°C	24-48 Hours

				cloudy ring		
<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	Negative reaction, no colour development / cloudy ring	35-37°C	24-48 Hours

PACKAGING

In 100 & 500 gm 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.

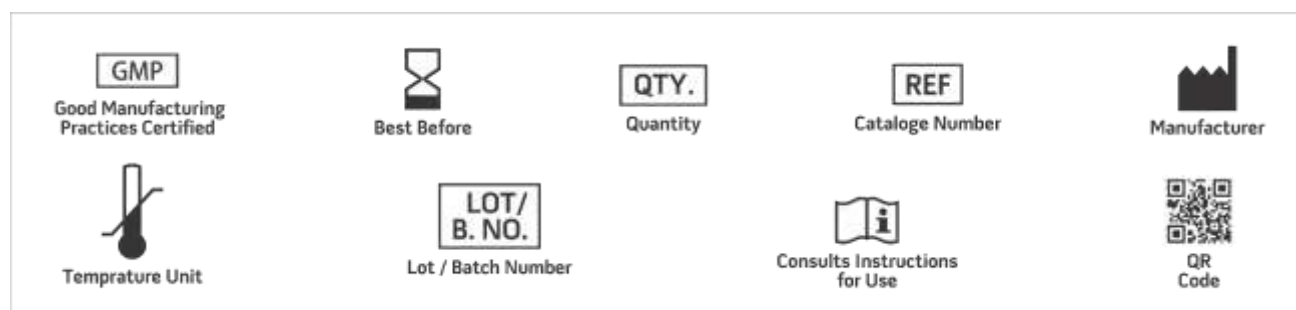
Product Deterioration: Do not use powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Bureau of Indian Standards IS: 5887 (Part I) 1976, reaffirmed 1986.
2. Macfaddin J., 1980, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.
3. International Organization for Standardization (ISO), 1994, Draft ISO/ DIS 10273.
4. Finegold and Baron, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V Mosby Co., St. Louis.
5. Lennette and others (Eds), 1985, Manual of Clinical Microbiology, 4th ed. ASM, Washington D.C.



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

***For Lab Use Only**

Revision: 05thOct. 2019