TM 1849 -TRYPTONE WATER
(ISO 7251:1993)

INTENDED USE
For detection of indole production by coliforms.

PRODUCT SUMMARY AND EXPLANATION
Tryptone Water is recommended by APHA and ISO Committee for detection of indole production by coliforms, which is a key feature in differentiation of bacteria. The indole test demonstrates the ability of certain bacteria to decompose the amino acid tryptophan to indole which accumulates in the medium. The composition & performance criteria of this medium are as per the specifications laid down in ISO 7251: 1993.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	20.000
Sodium chloride	5.000

PRINCIPLE
The medium contains Casein enzymic hydrolysate which acts as a good substrate for indole production because of its high tryptophan content. Certain organisms breakdown the amino acid tryptophan with the help of enzymes to produce indole, pyruvic acid and ammonia. The indole produced can be detected by either Kovacs or Ehrlich's reagent. Indole combines with the aldehyde present in the above reagent to give red colour in the alcoholic layer. The alcohol layer extracts and concentrates the red colour complex. Sodium chloride is added to the medium to provide a suitable osmotic environment.

INSTRUCTION FOR USE
- Dissolve 25.00 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into tubes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow colour, homogeneous free flowing powder
Appearance of Prepared medium	:	Yellow coloured, clear solution
pH (at 25°C)	:	7.5± 0.2

INTERPRETATION
Cultural characteristics observed after incubation. Add 0.2-0.3 ml Kovac's indole reagent (TR 008) to each tube after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Indole Reaction	Incubation Temp.	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Positive reaction (Red ring at the interface of the medium)	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	Negative reaction (No colour development / Cloudy ring)	35-37°C	18-24 Hours

Klebsiella pneumoniae	13883	50-100	Luxuriant	Negative reaction (No colour development / Cloudy ring)	35-37°C	18-24 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, if powder 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. Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 1998, Standard Methods for the Examination of Water and Wastewater, 20th Ed., APHA, Washington, D.C.
2. International Organization for Standardization (ISO), 1993, Draft ISO/DIS 9308-1.
3. International Organization for Standardization. 1993. Microbiology – general guidance for enumeration of presumptive E. coli – most probable number technique. ISO 7251, 1993-12-15, 2nd ed. ISO, Geneva, Switzerland.
4. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone.
5. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Williams and Wilkins, Baltimore.
6. Finegold S. M. and Baron E. J., 1986, Bailey and Scotts Diagnostic Microbiology, 7th Ed., The C.V. Mosby Co., St. Louis.

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

***For Lab Use Only**

Revision: 9th July 2020