

# TMV 1110 – TRYPTONE WATER (VEG.)

### **INTENDED USE**

For detection of indole production by microorganisms.

### PRODUCT SUMMARY AND EXPLANATION

This medium is prepared by using Veg hydrolysate in place of Casein enzymic hydrolysate which makes the medium free of BSE/TSE risks. Certain organisms breakdown the amino acid tryptophan with the help of enzymes that mediate the production of indole by hydrolytic activity. The indole produced can be detected by either Kovac's or Ehrlich's reagent. Indole combines with the aldehyde present in the above reagent to give red colour in the alcohol layer. The alcohol layer extracts and concentrates the red colour complex.

### **COMPOSITION**

| Ingredients      | Gms / Ltr |  |  |
|------------------|-----------|--|--|
| Veg. hydrolysate | 20.000    |  |  |
| Sodium chloride  | 5.000     |  |  |

## **PRINCIPLE**

The medium contains Veg hydrolysate is a good substrate for indole production because of its high tryptophan content. Sodium chloride balances the osmotic pressure.

# **INSTRUCTION FOR USE**

- Dissolve 25 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Light yellow coloured, may have a slightly greenish tinge, homogeneous, free

flowing powder.

**Appearance of prepared medium** : Yellow coloured, clear solution without any precipitate.

pH (at 25°C) : 7.5±0.2

# **INTERPRETATION**

Cultural characteristics observed after incubation.

| Microorganism             | ATCC  | Inoculum<br>(CFU) | Growth    | Indole reaction  | Incubation<br>Temperature | Incubation<br>Period |
|---------------------------|-------|-------------------|-----------|--|---------------------------|----------------------|
| Escherichia coli          | 25922 | 50-100            | Luxuriant | Positive reaction, red ring at the interface of the medium | 35-37°C                   | 18-24 Hours          |
| Enterobacter<br>aerogenes | 13048 | 50-100            | Luxuriant | Negative reaction, no colour development / cloudy ring     | 35-37°C                   | 18-24 Hours          |











| Klebsiella<br>pneumoniae | 13883 | 50-100 | Luxuriant | Negative reaction, no colour development / cloudy ring | 35-37°C | 18-24 Hours |
|--------------------------|-------|--------|-----------|--|---------|-------------|
|--------------------------|-------|--------|-----------|--|---------|-------------|

## **PACKAGING:**

In pack size 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.

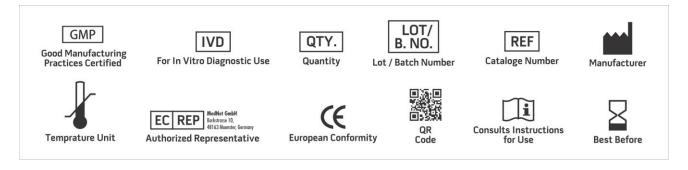
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### **DISPOSAL**

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

### **REFERENCES**

- 1. MacFaddin J.F., 2000(ed), Biochemical Tests for Identification of Medical Bacteria, 3rd edition, Lippinicott Williams and Wilkins, New York
- 2. Finegold and Baron, 1986, Bailey and Scott's 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

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