# TMV 824 – PHENOLPHTHALEIN PHOSPHATE AGAR (VEG.)

## INTENDED USE

For identification of phosphatase positive *Staphylococcus aureus.*

## PRODUCT SUMMARY AND EXPLANATION

This medium is prepared by using Veg peptone and Veg extract in place of Peptic digest of animal tissue and Beef extract which make the medium free of BSE/TSE risks. Phenolphthalein Phosphate Veg Agar is the modification of Phenolphthalein Phosphate Agar which is used for the identification of phosphatase positive colonies of *Staphylococccus aureus* which is a coagulase positive pathogenic strain. Phosphatase production is determined by the liberation of phenolphthalein which is indicated by the change in colour of the medium. When alkali is added to this medium, the liberated phenolphthalein gives bright pink - red colouration.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| **Veg peptone** | 5.000 |
| **Veg extract** | 3.000 |
| **Sodium chloride** | 5.000 |
| **Sodium phenolphthalein phosphate** | 0.012 |
| **Agar** | 15.000 |

## PRINCIPLE

This media contains Veg peptone and Veg extract that supply the nitrogenous compounds, growth factors and trace ingredients essential for the growth of *Staphylococcus aureus*. Sodium phenolphthalein phosphate serves as a substrate for the phosphatase enzyme. Sodium chloride maintains osmotic equilibrium.

## INSTRUCTION FOR USE

- Dissolve 28.00 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

## QUALITY CONTROL SPECIFICATIONS

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

**Appearance of prepared medium** : Yellow coloured clear gel forms in tubes as slants.

**pH (at 25°C)** : 7.4 ± 0.2

## INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Phosphatase (after incubation add 1 drop of 40% NaOH) | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|---|

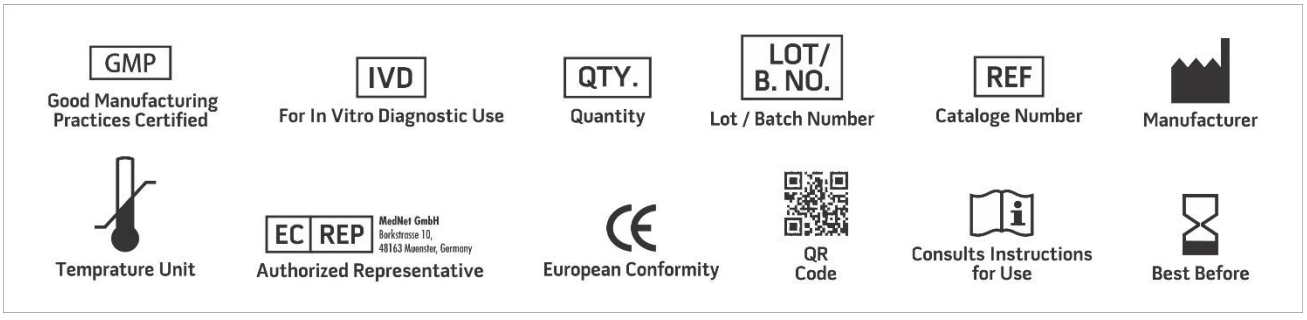
| | | | | | | |
|---|---|---|---|---|---|---|
| *Escherichia coli* | 25922 | 50-100 | Luxuriant | - | 35-37°C | 18-24 Hours |
| *Staphylococcus aureus* | 25923 | 50-100 | Luxuriant | Bright pink colour on addition of 40% NaOH | 35-37°C | 18-24 Hours |
| *Staphylococcus epidermidis* | 12228 | 50-100 | Luxuriant | Bright pink colour on addition of 40% NaOH | 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. MacFaddin J.F., 2000, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.
2. Lewis B., 1961, J. Med. Lab. Technol., 18: 112.
3. Barber M. and Kuper S.W.A., 1951, J. Pathol. Bacteriol., 63:65.




**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
**Revision: 08 Nov., 2019**