

# TMV 268 - PSEUDOMONAS ISOLATION AGAR (VEG.)

### **INTENDED USE**

For selective isolation and identification of *Pseudomonas aeruginosa* from clinical and non-clinical samples.

### PRODUCT SUMMARY AND EXPLANATION

Pseudomonas Isolation Agar (Veg) is prepared by replacing Peptic digest of animal tissue with Veg peptone which makes the medium BSE/TSE risk free. Pseudomonas Isolation Agar (Veg) is a modification of the Medium A formulated by King et al which was developed for improved detection and differentiation of *Pseudomonas*.

### **COMPOSITION**

Ingredients	Gms / Ltr
Veg peptone	20.000
Magnesium chloride	1.400
Potassium sulphate	10.000
Triclosan (Irgasan)	0.025
Agar	13.600

### **PRINCIPLE**

This medium consists of Veg peptone which provides nitrogenous compounds and other essential growth nutrients. Glycerol is a source of energy and promotes pyocyanin i.e. pigment production which is characteristic of *Pseudomonas*. Potassium sulphate and magnesium chloride also helps for pyocyanin production. Triclosan selectively inhibits grampositive and gram-negative bacteria but *Pseudomonas* species are resistant to it. Some pyocyanin producing strains may also produce small amounts of fluorescein, resulting in the production of a blue-green to green pigment.

# **INSTRUCTION FOR USE**

- Dissolve 45.03 grams in 1000 ml distilled water 20 ml glycerol.
- 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 : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing

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**Appearance of prepared medium** : Yellow coloured clear to slightly opalescent gel forms in Petri plates.

**pH (at 25°C)** :  $7.0 \pm 0.2$ 

### **INTERPRETATION**

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
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Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Green	35-37°C	18-48 Hours
Pseudomonas aeruginosa	10145	50-100	Luxuriant	>=70%	Blue to blue- green	35-37°C	18-48 Hours
Escherichia coli	25922	>=10³	Inhibited	0%	-	35-37°C	18-48 Hours
Proteus mirabilis	25933	>=10³	Inhibited	0%	-	35-37°C	18-48 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.

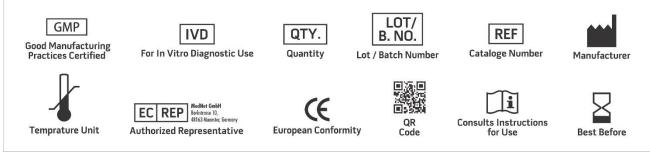
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### **DISPOSAL**

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

## **REFERENCES**

- 1. King, Ward and Raney, 1954, J. Lab. Clin. Microbiol., 44:301.
- 2. Forbes BA, Sahm DF, Weissfeld AS, 2002, Bailey and Scott's Diagnostic Microbioligy, 11th ED., The C.V Mosby Co., St. Louis.
- 3. MacFaddin J.F., 1985, Media for Isolation Cultivation -Identification-Mainte nance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
- 4. Furia and Schenkel, 1968, Soap and Chemical specialities.



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





