

## Technical Information

### Penicillin and Pimaricin Pseudomonas Agar Base (PP Pseudomonas Agar Base)

#### Product Code: DM 2788

**Application:** - PP Pseudomonas Agar Base is used for selective isolation of *Pseudomonas* species on addition of supplements.

#### Composition\*\*

Ingredients	Gms / Litre
Pancreatic digest of gelatin	16.000
Casein enzymic hydrolysate	10.000
Potassium sulphate	10.000
Magnesium chloride	1.400
Agar	15.000
Final pH ( at 25°C)	7.2±0.2

\*\*Formula adjusted, standardized to suit performance parameters

#### Principle & Interpretation

PP Pseudomonas Agar Base *Pseudomonas* species are aerobic, non-spore forming, gram negative rods, found in water, soil and plants including fruits and vegetables. *Pseudomonas aeruginosa* has become increasingly recognized as an emerging opportunistic pathogen of clinical relevance especially in patients with compromised host defense mechanisms. Several different epidemiological studies have found its occurrence as a nosocomial pathogen (1) *P.aeruginosa* strains produces two types of soluble pigments, the fluorescent pigment pyoverdinin and the blue pigment pyocyanin. Pyocyanin (from "pyocyaneus") refers to "blue pus", which is a characteristic of suppurative infections caused by *P. aeruginosa*. Penicillin and Pimaricin Pseudomonas Agar Base is formulated as recommended by ISO Committee (2). The medium contains pancreatic digest of gelatin and casein enzymic hydrolysate which serves provides essential nitrogenous nutrients and carbon required for the growth of *Pseudomonas*. Potassium sulphate and magnesium chloride serves to enhance pigment production. Addition of PP Pseudomonas Selective Supplement which contains Penicillin and PP Pseudomonas Selective Supplement II which contains Pimaricin (natamycin) to the medium helps in the selective isolation of *Pseudomonas*, thereby inhibiting the accompanying flora.

#### Methodology

Suspend 52.4 grams of dehydrated powder media in 1000 ml distilled water containing 5 ml glycerol. Mix thoroughly & heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add sterile rehydrated contents of PP Pseudomonas Selective Supplement (MS 2264) and PP Pseudomonas Selective Supplement II (MS 2265). Shake well before pour into sterile Petri plates.

#### Quality Control

##### Appearance

Cream to yellow homogeneous free flowing powder.

##### Gelling

Firm, comparable with 1.5% Agar gel.

##### Colour and Clarity

Yellow coloured clear to slightly opalescent gel forms in Petri plates.

