TM 267 – PSUEDOMONAS AGAR P (FOR PYOCYANIN)

INTENDED USE

For detection of pyocyanin production by *Pseudomonas* species.

PRODUCT SUMMARY AND EXPLANATION

Pseudomonas Agar is based on the formulation described by King et al and as recommended in U.S. Pharmacopoeia for detecting pyocyanin, a water soluble pigment by *Pseudomonas* species. This medium enhances the elaboration of pyocyanin but inhibits the formation of fluorescein pigment. The fluorescein pigment diffuses from the colonies of *Pseudomonas* into the agar and shows blue colouration. Some *Pseudomonas* strains produce small amounts of fluoresce in resulting in a blue-green colouration.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	20.000
Potassium sulphate	10.000
Magnesium chloride	1.400
Agar	15.000

PRINCIPLE

Peptone supply carbon, nitrogen substances, amino acids, other essential growth nutrients. Potassium sulphate and magnesium chloride, which enhances the pyocyanin production and suppresses the fluorescein production. A pyocyanin-producing *Pseudomonas* strain will usually also produce fluorescein. It must, therefore, be differentiated from other simple fluorescent Pseudomonads by other means. Temperature can be a determining factor as most other fluorescent strains will not grow at 35°C. Rather, they grow at 25-30°C.

INSTRUCTION FOR USE

- Dissolve 46.4 grams in 1000 ml purified/distilled water containing 10 ml glycerin.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes or as per validated cycle.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder
Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel forms in Petri plates
pH (at 25°C) : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Observed lot CFU	Recovery	Color of Medium	Incubation Temperature	Incubation Period

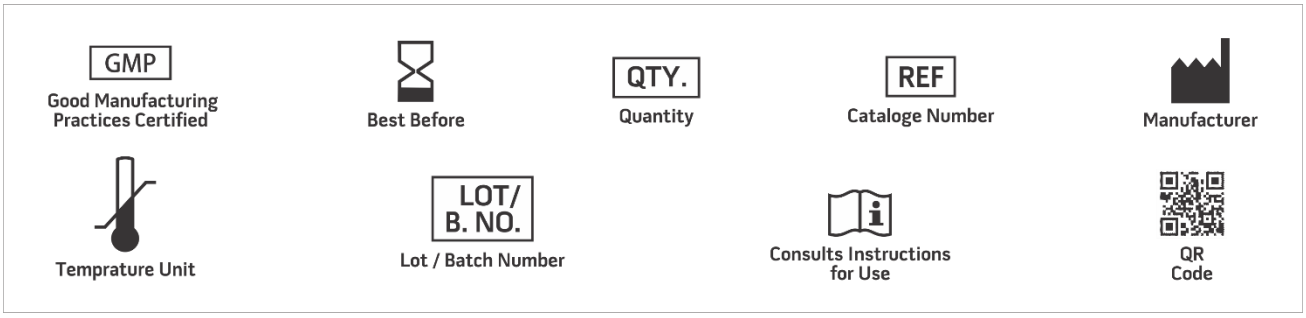
Pseudomonas aeruginosa	9027	50 -100	Luxuriant	25-100	>=50 %	blue-green	35-37°C	18-48 Hours
Pseudomonas aeruginosa	27853	50 -100	Luxuriant	25-100	>=50 %	blue-green	35-37°C	18-48 Hours

PACKAGING:
In pack size of 100 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. and Clin. Med., 44:301
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
3. The United States Pharmacopoeia, 2008, The United States Pharmacopoeial Convention, Rockville, MD.



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