Chaitanya Group Of Industries

ReadyMED®
Dehydrated Cell Culture Media

Technical Data Sheet

Pseudomonas Agar Pyocyanin

RDM-PAP-01

Principle
Pseudomonas agar pyocyanin is described by King, Ward and Raney (1954). Pseudomonas agar pyocyanin is composed of peptone, magnesium chloride, potassium sulfate and agar. Peptone is source of carbon and nitrogen. Magnesium chloride and potassium sulfate stimulates pyocyanin production. Agar is a solidifying agent. The Glycerol is added in the medium, as an excess carbon source.

Use: Recommended for detection of pyocyanin producing *Pseudomonas*.

Contents*

Ingredients	**Gram/Litre**
Peptone	20.00
Magnesium Chloride	1.40
Potassium Sulfate	10.00
Agar	15.00
pH at 25˚C	7.0 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 46.40 grams in 1000 ml distilled water contain 1% glycerol. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 min, cool it to 42-45 °C and distribute aseptically in petri plates. Ensure complete solidification and inoculate test sample aseptically.

Specimens types analyzed
Pharmaceutical samples, clinical and non-clinical samples etc.

Precautions to be taken
These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation
The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Light beige colored free flowing, homogeneous powder
Reaction of 4.64% solution with 1% glycerol	7.0 ±0.2 at 25 ˚C
pH	6.80- 7.20
Gelling	Firm comparable with 1.5% agar gel
Color and clarity of ready medium	Light amber colored opalescent gel
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 ºC for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 ºC for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Organism	Inoculum	Growth	Pigment production	Incubation Temperature	Incubation period
Pseudomonas aeruginosa (ATCC 27853)	50-100	Luxurious	Blue	33-37 ℃	18-48 h

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. King, E. O., M. K. Ward, and D. E. Raney. (1954). *Two simple media for the demonstration of pyocyanin and fluorescein*. J. Lab. Clin. Med. 44:301.
4. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.

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