Technical Data Sheet

Packaging Details

mm/ bag.

Product: Cetrimide Agar



Storage

2-25 °C

Shelf Life

6 months

Specification

Solid culture medium for selective isolation of *Pseudomonas aeruginosa* according to the Pharmacopeial Harmonised Method and the ISO standard.

1 box containing: 6 plastic bags with 5 plates of 55

Presentation

30 Membrane filtration plates 55 mm Plates for filtration purposes with: 9 ± 1 ml

Composition

20.00
1.40
10.00
0.30
13.60
10.00 ml

Description /Technique

Description:

The Cetrimide Agar is based on the resistance of *P. aeruginosa* strains to Quaternary Ammonium Compounds (QAC's). With Cetyltrimethyl-Ammonium Bromide a growth at concentrations of 1g/L has been archieved, but has been very poor and slow. An inhibitor concentration of 0,3-0,5 g/L does not seem to affect the viability of pyogenic species. But it does inhibit the accompanying bacteria, both Gram positive and Gram negative organisms. Other species of Pseudomonas which may develop at lower inhibitory concentrations are also inhibited.

Although P. aeruginosa prevails over any other fastidious bacteria after a 48 hour incubation at 30-35°C, an initial incubation at 42°C for 48 hours followed by an incubation at 35°C for 48 hours is recommended. Using this method almost complete inhibition of other microorganisms is obtained.

Technique:

Collect, dilute and prepare samples and volumes to be filtered as required according to specifications, directives, official standard regulations and/or expected results.

Filter the sample through a 0.45 mm Ø pore membrane and apply it onto the surface of the agar.

Incubate the plates right side up aerobically at 30-35 °C for 18-72 h.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications).

After incubation, count the colonies with a blue-greenish appearance due to pigment production by *Pseudomonas* sp.

Calculate total microbial count per ml of sample by multiplying the average number of colonies per plate by the inverse dilution factor. Report results as Colony Forming Unit (CFU) per ml along with incubation time and temperature.

Presumptive isolation of *Pseudomonas* sp must be confirmed by further tests.



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Quality control

Physical/Chemical control Color : Off-white / opalescent

pH: 7.2 ± 0.2 at 25°C

Microbiological control

Inoculate MF: 10-100 CFU (productivity)/ 100-1000 CFU (selectivity), according to harmonized pharmacopoeial monographs

Growth

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30-35°C. Reading at 18-72h

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012 Ps. aeruginosa ATCC® 9027, WDCM 00026 Ps. aeruginosa ATCC® 27853, WDCM 00025 Ps. aeruginosa ATCC® 10145, WDCM 00024 Inhibited Good (≥ 50%) Green-yellowish to dark green colonies Good (≥ 50%) Green-yellowish to dark green colonies Good (≥ 50%) Green-yellowish to dark green colonies

Sterility Control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH. Check at 7 days after incubation in same conditions.

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