Condalab

Reference: 4704 **Technical Data Sheet**

Product: **CETRIMIDE AGAR EUROPEAN PHARMACOPOEIA, USP**

Specification

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

Presentation

	Packaging Details	Shelf Life	Storage
30 Prepared Plates 55 mm Plates for filtration purposes with: 9 ± 1 ml	1 box containing: 5 plastic bags with 6 plates of 55 mm/ bag.	6 months	2-25°C

Composition

Composition (g/l):

Gelatin Peptone	20.00
Magnesium chloride	1.40
Dipotassium sulfate	10.00
Cetrimide	0.30
Agar	13.60
Glycerol	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.

Quality control

Physical/Chemical control

Color : Off-white / opalescent pH: 7.2 ± 0.2 at 25°C

Microbiological control

Membrane Filtration /Practical range 100±20 CFU; Min. 50 CFU (Productivity)./10^4-10^6 CFU for Selectivity.
Aerobiosis. Incubation at 30-35°C. Reading at 18-72h

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

Sterility Control

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

Bibliography

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