Condalab

Reference: 4740 **Technical Data Sheet**

Product: (CN) CETRIMIDE AGAR

Specification

Selective solid medium used for the detection of *Pseudomonas aeruginosa* according to ISO 16266 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	16.000
Casein Peptone	10.000
Magnesium chloride	1.400
Potassium sulfate	10.000
Cetrimide	0.200
Sodium Nalidixate	0.015
Glycerol	10.000 ml
Agar	13.600

Description /Technique

Description:

The CN Selective Medium for *Pseudomonas* was progressively developed from the basic media of King, Ward and Raney for the production of pigments. Browne and Lowbury add the cetrimide as selective agent and Goto and Enomoto improves efficiency by adding nalidixic acid. The presence of both inhibitors eliminates the contaminant microbiota from heavily polluted specimens and was adopted by ISO Standard for the detection of *Ps. aeruginosa* by filtering membrane in water.

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 air room atmosphere at 36 ± 2°C for 44±4h.
(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: 7.1 ± 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.
Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Aerobiosis. Incubation at 36 ± 2°C, reading at 44±4 h

Microorganism	Growth
Ps. aeruginosa ATCC® 9027, WDCM 00026	Good (≥ 50 %)
Ps. aeruginosa ATCC® 27853, WDCM 00025	Good (≥ 50 %)
Ps. aeruginosa ATCC® 10145, WDCM 00024	Good (≥ 50 %)
Escherichia coli ATCC® 8739, WDCM 00012	Inhibited
Enterococcus faecalis ATCC® 19433, WDCM 00009	Inhibited

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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· ISO 16266 Standard (2006) Water Quality. - Detection and enumeration of Pseudomonas aeruginosa. - Method by membrane filtration.

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