

# TECHNICAL DATA SHEET

Article No. 9254

## Cetrimid Agar membrane filtration plates

### SPECIFICATION

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

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

### COMPOSITION IN G/L

Gelatin peptone	20.00
Magnesium chloride	1.40
Dipotassium sulfate	10.00
Cetrimide	0.30
Agar	13.60
Glycerol	10.00 ml

### PACKAGING DETAILS

#### 9254-30PLATES

30 Plates for filtration purposes 55 mm

Content: 9 ± 1 ml

Packaging unit: 1 box containing: 6 plastic bags with 5 plates of 55 mm/ bag.



## GUIDELINES

### 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 achieved, 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.

## MICROBIOLOGICAL CONTROL

Inoculate MF: 50-100 CFU (productivity)/10<sup>3</sup>-10<sup>4</sup> CFU for Selectivity.

Growth Promotion Test according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014/A1:2018

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

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

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

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## BIBLIOGRAPHY

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- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 22717 Standard (2015) Cosmetics - Microbiology - Detection of *Pseudomonas aeruginosa*.
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- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.

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## STORAGE

2-25 °C

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## SHELF LIFE

6 months unopened from date of manufacture

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