

TECHNICAL DATA SHEET

Article No. 9682

Cetrimid Agar, prepared culture medium

SPECIFICATION

Ready-to-use culture medium, bottles, sterile. Solid culture medium for selective isolation of *Pseudomonas aeruginosa*. Ph.Eur./USP harm., ISO 22717.

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

COMPOSITION IN G/L

Gelatin peptone 20.00

Magnesium chloride 1.40

Potassium sulfate 10.00

Glycerol 10.00 ml

Cetrimide 0.30

Agar 13.60

PACKAGING DETAILS

9682-10x100 ml

 $\begin{array}{ccc} \mbox{Volume} & 100 \pm 3 \ \mbox{ml} \\ \mbox{Bottle size} & 125 \ \mbox{ml} \\ \mbox{Packaging unit} & 10 \ \mbox{bottles} \end{array}$

1 box with 10 x 100 ml in 125 ml bottles. Injectable cap: Plastic screw inner cap.

For the use of syringe needles with a diameter \leq 0.8 mm.

9682-10x200 ml

 $\begin{array}{lll} \mbox{Volume} & 200 \pm 5 \ \mbox{ml} \\ \mbox{Bottle size} & 250 \ \mbox{ml} \\ \mbox{Packaging unit} & 10 \ \mbox{bottles} \end{array}$

1 box with 10 x 200 ml in 250 ml bottles. Injectable cap: Plastic screw inner cap.

For the use of syringe needles with a diameter \leqslant 0.8 mm.





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.

Technique:

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

Melt the medium contained in bottles in a water bath or in a microwave oven, avoiding overheating, before pouring into Petri dishes when cooled to room temperature.

Once solidified on a flat surface, spread the plate streaking methodology or by spiral method.

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

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

After incubation, enumerate all the colonies that have appeared onto the surface of the agar with a blue-greenish colour (due to pigment production by *Pseudomonas sp*).

Each laboratory must evaluate the results according to their specifications.

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

MICROBIOLOGICAL CONTROL

Melting – pour plates – Inoculation Practical range 100 \pm 20 CFU. min. 50 CFU (productivity) / 10^4 - 10^6 CFU (selectivity)

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

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

Microorganism	Growth
Ps. aeruginosa ATCC® 27853, WDCM 00025	Good (≥ 50 %) Green-yellowish to dark green colonies
Ps. aeruginosa ATCC® 9027, WDCM 00026	Good (≥ 50 %) Green-yellowish to dark green colonies
Ps. aeruginosa ATCC® 10145, WDCM 00024	Good (≥ 50 %) Green-yellowish to dark green colonies
Escherichia coli ATCC® 8739, WDCM 00012	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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- -FDA (Food and Drug Adminstrations) (1998) Bacteriological Analytical Manual. 8th ed. Rev. A. AOAC International. Gaitherburg. VA.
- -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.
- -LOWBURY, E.J.L. & A.G. COLLINS (1955) The use of a new cetrimide product in a selective medium for Pseudomonas aeruginosa J. Clin. Path. 8.47.
- -USP 33 NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.

STORAGE

8-25 °C

SHELF LIFE

12 months unopened from date of manufacture

updated: 07.09.2023

