

Specification

Medium for the enumeration and cultivation of fungi.

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.	5 months	2-25°C

Composition

Composition (g/l):

D(+)-Glucose.....	40.00
Peptone from casein	5.00
Meat Peptone.....	5.00
Agar.....	15.00
Chloramphenicol.....	0.05

Description /Technique

Description

This culture medium differs from the classical Sabouraud Agar only by the addition of chloramphenicol. This thermostable antibiotic has a broad antibacterial spectrum which ensures the selective isolation of fungi from highly contaminated samples.

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 pore membrane and apply it onto the surface of the agar.

Incubate the plates aerobically at $22 \pm 2^\circ\text{C}$ up to 5 days

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

After incubation, enumerate all the colonies that have appeared onto the surface of the membrane.

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

Quality control

Physical/Chemical control

Color : Straw-coloured yellow pH: 5.6 ± 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 20 - 25°C , reading after 24-72 hours for bacteria and 3-5 days for yeasts and moulds

Microorganism

Aspergillus brasiliensis ATCC® 16404, WDCM 00053

Candida albicans ATCC® 10231, WDCM 00054

Escherichia coli ATCC® 8739, WDCM 00012

Bacillus subtilis ATCC® 6633, WDCM 00003

S. cerevisiae ATCC® 9763, WDCM 00058

Growth

Good ($\geq 50\%$)

Good ($\geq 50\%$)

Inhibited

Inhibited

Good ($\geq 50\%$)

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

- AJELLO, L. (1957) Cultural Methods for Human Pathogenic Fungi J. Chron. Dis. 5:545-551.
- EUROPEAN PHARMACOPOEIA 6.0 (2008) 6th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. EDQM. Council of Europe. Strasbourg.
- GEORGE, L.K., AJELLO, L. & PAPAGEORGE, C. (1954) Use of Cycloheximide in the Selective Isolation of Fungi Pathogenic to Man. J. Lab. Clin. Med, 44 (422-428).
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 16212 Standard (2017) Cosmetics - Microbiology - Enumeration of yeast and mould.
- PAGANO, J. LEVIN, J.D. & TREJO, W. (1957-58) Diagnostic Medium for Differentiation of Species of Candida. Antibiotics Annual, 137-143.
- SABOURAUD, R. (1910) Les Teignes. Masson, Paris.