

Specification

Medium for the enumeration and cultivation of fungi, in surfaces.

Presentation

	Packaging Details	Shelf Life	Storage
80 Contact Plates/Irradiated Contact Plates - Triple Wrapping with: 15 ± 2 ml	1 box with 8 RD-PACK with 10 contact plates/pack; and double wrapping cellophane. Every pack exhibits an irradiation indicator (8-14kGy).	4 months	2-14 °C

Composition

Composition (g/l):	
Casein peptone.....	5.00
Meat peptone.....	5.00
D(+)-Glucose.....	40.00
Chloramphenicol.....	0.05
Agar.....	15.00

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 bacteria highly contaminated samples.

Technique

Contact plates are used in the microbiological control of disinfection and cleaning of surfaces. It acts simultaneously as a sampler and incubation culture medium without the need for any other intermediate steps.

The plates come in a form appropriate for this function and can be used with different culture media depending on the type of microbe that needs to be controlled. On average the plates provide a contact surface of approximately 25 cm².

To use, remove the cover and gently press the culture medium on the surface to be controlled, ensuring contact between the two surfaces. The Contact plate is removed and covered with the lid to prevent air contamination. It is advisable that the lid is secured with adhesive tape and the bottom labelled with the sampling data (place, date and time). The inoculated plates are incubated at 32-35 °C for 24-48 hours and examined daily. For fungi, the incubation is carried out at 22-25 °C for 5 days and examined daily.

If the sample surfaces are rough, the Contact plates will not make good contact, even when the pressure is increased. In these cases it is advisable to delineate an sample surface area of 25 cm squared and rub this area vigorously with a wet sterile swab and then rub the swab over the Contact plate.

If verifying the effectiveness of a cleaning or disinfection process, Contact plates should be used within two hours after the end of the process, ensuring that the sample surface is dry. It is advisable to always include positive controls, sampling the area before disinfection or dirty areas beside the disinfected area.

The technician will determine the frequency of sampling and disinfection according to performance criteria.

Apply the agar directly onto surface to be monitored ensuring that the pressure is distributed over the whole plate for 10 seconds.

Quality control

Physical/Chemical control

Color : Straw-coloured yellow pH: 5.6 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10⁴-10⁶ (selectivity).

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

Aerobiosis. Incubation at 25 ± 2,5 °C and 30-35°C. Reading at 72 hours for bacteria and 3-5 days for yeast and moulds.

Microbiological control according to ISO 11133:2014/A1:2018.

Microorganism

Aspergillus brasiliensis ATCC® 16404, WDCM 00053
S. cerevisiae ATCC® 9763, WDCM 00058
Escherichia coli ATCC® 8739, WDCM 00012
Bacillus subtilis ATCC® 6633, WDCM 00003
Candida albicans ATCC® 10231, WDCM 00054 (20-25°C)
Candida albicans ATCC® 10231, WDCM 00054 (30-35°C)

Growth

Good (≥50 %)
 Good (≥50 %)
 Inhibited
 Inhibited
 Good (≥50 %)
 Good (≥50 %)

Sterility Control

Incubation 48 h at 30-35 °C and 48 h 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.
- COLIPA (1997) Guidelines on Microbial Quality Management (MQM). Brussels.
- EUROPEAN PHARMACOPOEIA 11.0 (2023) 11th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. 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).
- HANTSCHKE, D. (1968) Mykosen, 11, (769-778).
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 4973:2023. Quality control of culture media and diluents used in cosmetics standards
- ISO 16212 Standard (2017) Cosmetics - Microbiology - Enumeration of yeast and mould.
- ISO 18416 Standard (2015) Cosmetics - Microbiology - Detection of *Candida albicans*.
- PAGANO, J. LEVIN, J.D. and TREJO, W. (1957-58) Diagnostic Medium for Differentiation of Species of *Candida*. Antibiotics Annual, 137-143.
- SABOURAUD, R. (1910) Les Teignes. Masson, Paris.
- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.