

Specification

Medium for detection, isolation and enumeration of fungi, particularly yeast and moulds, also from air and water samples.

Presentation

20 Prepared Plates
90 mm
with: 21 ± 2 ml

Packaging Details

1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life

3,5 months

Storage

2-14°C

Composition

Composition (g/l):

Malt extract..... 30.00
Soy peptone..... 3.00
Cloramphenicol..... 0.10
Agar..... 15.00

Description /Technique

Malt Extract + Chloramphenicol Agar promotes the growth of almost all fungi because of its balanced composition, and its ability to inhibit bacteria to the addition of antibiotic.

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

Spread the plates by streaking methodology or by spiral method. Incubate the plates up aerobically at 25-30 °C for up to 5 days. (Incubation times longer 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 agar.

Each laboratory must evaluate the results according to their specifications.

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

Quality control

Physical/Chemical control

Color : yellow

pH: 5.5 ± 0.2 at 25°C

Microbiological control

Spiral Spreading: Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity) / 10^4 - 10^6 CFU (Selectivity).

Aerobiosis. Incubation at 22.5 ± 2 °C during up to 5 days for yeast and moulds

Microorganism

S. cerevisiae ATCC® 9763, WDCM 00058

Candida albicans ATCC® 10231, WDCM 00054

Aspergillus brasiliensis ATCC® 16404, WDCM 00053

Bacillus subtilis ATCC® 6633, WDCM 00003

Escherichia coli ATCC® 8739, WDCM 00012

Growth

Good (≥ 50 %)

Good (≥ 50 %)

Good (≥ 50 %)

Inhibited

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

- ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- BALLOWS, HAUSLER, HERMAN, ISENBERG & SHADOMY (eds.) (1991) Manual of Clinical Microbiology. ASM. Washington.
- DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington.
- FDA (Food and Drug Administrations) (1978) Bacteriological Analytical Manual A.O.A.C. Washington.
- 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.
- ISO 16000-17:2008 Indoor Air - Detection and enumeration of moulds - Culture Based method.
- RAPP, M (1974) Indikator-Zusätze zur Keimdifferenzierung auf wärze und Malzextrakt Agar. Milchwiss. 29:341-34.
- REIS, J. (1972) Ein selektives kulturmedium für der Nachweiss von *Aspergillus flavus*. Zbl. Bakt. Hyg. I. Abt. Orig. 220:564-566.