

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 months

Storage

2-25 °C

Composition

Composition (g/l):

Malt extract.....30.00

Soy peptone.....3.00

Agar.....15.00

Description /Technique

Description:

Malt Extract Agar may support the growth of almost all of the fungi very well, because of its balanced composition, and restrains most of the bacteria due to the strong acidity.

Technique:

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

Incubate the plates right side up aerobically at 20-25 °C for up 5/7 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: 4.3 ± 0.2 at 25°C

Microbiological control

Membrane Filtration; Practical range 100 ± 20 CFU. min. 50 CFU (productivity).

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

Aerobic.Incubation at 22.5 ± 2 °C 3-5 days (moulds and yeast).

Microorganism

Aspergillus brasiliensis ATCC® 16404

Candida albicans ATCC® 10231, WDCM 00054

Growth

Good ($\geq 70\%$)

Good ($\geq 70\%$)

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 16000-17:2008 Indoor Air - Detection and enumeration of moulds - Culture Based method.
- RAPP, M (1974) Indikator-Zusätze zur Keimdifferentenzierung auf wärze und Malzextrakt Agar. Milchwiss. 29:341-34.
- REIS, J. (1972) Ein selektives kulturmedium für der Nachweis von *Aspergillus flavus*. Zbl. Bakt. Hyg. I. Abt. Orig. 220:564-566.