

TECHNICAL DATA SHEET

Article No. 9270

Malt Extract Agar, ready-to-use culture medium

SPECIFICATION

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

Colour: Yellow
pH: 5.6 ± 0.2 at 25 °C

COMPOSITION IN G/ L

Malt Extract	30.00
Soy Peptone	3.00
Agar	15.00

PACKAGE DETAILS

9270-10x100ML

Volume	100 ± 3 ml
Bottle size	125 ml
Packaging unit	10 bottles

1 box with 10 x 100 ml in 125-ml-bottles. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended

9270-10x200ML

Volume	200 ± 5 ml
Bottle size	250 ml
Packaging unit	10 bottles

1 box with 10 x 200 ml in 250-ml-bottles. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended



DESCRIPTION

Malt Extract Agar promotes the growth of almost all fungi because of its balanced composition, and its ability to inhibit most bacteria due its low pH.

TECHNIQUE

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 48h up 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.

Note: The solid mediums can be melted in different ways: autoclave, bath and, if the customer considers appropriate, also the microwave. Whenever the microwave option is chosen, it is necessary to take certain safety measures to avoid breaking of the containers, such as loosening the screw cap and putting the bottle or tube in a water bath in the microwave. The fusion temperature and time will depend on the shape of the container, the volume of medium and the heat source. Avoid overheating as both the heating periods.

MICROBIOLOGICAL CONTROL

Melt Medium - Prepare Plates - Spiral Spreading: 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	Growth
<i>Candida albicans</i> ATCC® 10231, WDCM 00054	Good (≥70%)
<i>Saccharomyces cerevisiae</i> ATCC® 9763, WDCM 00058	Good (≥70%)
<i>Aspergillus brasiliensis</i> ATCC® 16404, WDCM 00053	Good (≥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.

REFERENCES

- 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.

STORAGE

8 - 25 °C

SHELF LIFE

18 months unopened from date of manufacture

last updated: 23.08.2022

