

CM 21550 - SABOURAUD MALTOSE AGAR

INTENDED USE

For propagation of yeasts and molds, particularly fungi concerned with skin and scalp lesions.

PRODUCT SUMMARY AND EXPLANATION

Fungi were among the first microorganisms recognized because some of the fruiting structures, such as the mushrooms, are large enough to be seen without a microscope. Fungi can be grouped simply on the basis of morphology as either yeasts or moulds. Sabouraud Maltose Agar was formulated by Sabouraud and is used for the isolation and differentiation of yeast and moulds.

The acid reaction of the final medium is inhibitory to a large number of bacteria making it particularly useful for cultivating fungi and aciduric microorganisms. For isolation of fungi from contaminated specimens, a selective medium should be inoculated simultaneously. Incubate cultures for 4 to 6 weeks before reporting as negative.

COMPOSITION

Ingredients	Gms / Ltr
Maltose	40.000
Mycological peptone	10.000
Agar	15.000

PRINCIPLE

Mycological peptone provides nitrogen, vitamins, minerals, amino acids and growth factors. Maltose provides an energy source for the growth of microorganisms. The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens.

INSTRUCTION FOR USE

- Dissolve 65 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 5.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus brasiliensis	16404	10-100	Good-luxuriant	≥50%	25 - 30°C	48 - 72 Hours



Candida albicans	10231	10-100	Good-luxuriant	>=50%	25 - 30°C	48 - 72 Hours
Escherichia coli	25922	50-100	Good-luxuriant (Inhibited on media with lower pH)	>=50%	25 - 30°C	48 - 72 Hours
Lactobacillus casei	9595	50-100	Good-luxuriant	>=50%	25 - 30°C	48 - 72 Hours
Saccharomyces cerevisiae	9763	10-100	Good-luxuriant	>=50%	25 - 30°C	48 - 72 Hours
Trichophyton rubrum	28191	50-100	Good-luxuriant	>=50%	25 - 30°C	Upto 7 days

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Davidson and Dowding, 1932, Arch. Dermatol. Syphilol. 26:660.
2. Davidson, Dowding and Buller. 1932. Can. J. Res. 6:1.
3. Frank L. S., 1932, Arch. Dermatol. Syphilol., 26: 457
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Murray P. R., Baron J. H., Tenover F. C., Tenover J. H. and Tenover R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
7. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3: 1061.

