SABOURAUD MALTOSE BROTH

CAT Nº: 1213

For the cultivation of yeasts, molds and acidophilic bacteria, as well as for sterility tests

FORMULA IN g/l

Maltose	40.00	Peptone Mixture	10.00

Final pH 5.6 ± 0.2 at 25ºC

PREPARATION

Suspend 50 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

SABOURAUD MALTOSE BROTH is a modification of Sabouraud Dextrose Broth in which maltose is substituted for dextrose. It is a selective broth because of its acidic pH.

Maltose is the fermentable carbohydrate providing carbon and energy. Peptone mixture provides nitrogen, vitamins, minerals and amino acids essential for growth. The low pH suits fungi growth, particularly dermatophytes, and is slightly inhibitory to contaminating bacteria in clinical specimens.

Inoculate sample and incubate at 30°C and observed after 40-72 hours.

The growth of molds appears as cotton balls in the medium. Initially they form a membrane at the top of the liquid/air surface.
The growth of yeasts and bacteria are manifested by a homogeneous turbidity, which can be then stained and viewed microscopically.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 30°C and observed after 40-72 hours.

Microorganisms	Growth
Aspergillus brasiliensis ATCC 16404	Good
Candida albicans ATCC 26790	Good
Trichophyton mentagrophytes ATCC 9533	Good
Escherichia coli ATCC 25922	Partially Inhibited
Lactobacillus casei ATCC 9595	Good

BIBLIOGRAPHY

Derm. Wschr 124:665 Trans. New York Acad. Sci. Series II 14:254. 1952

Sabouraud, R. 1892. Ann. Dermatol. Syphilol. 3:1061.
Jarett, L., and A. C. Sonnenwirth (ed) 1980. Gradwohl's clinical laboratory methods and diagnosis, 8th ed. CV Mosby. Davidson, A.M., E.S. Dowding, and A.H.R. Buller. 1932. Hyphal fusions in dermatophytes. Can J. Res. 6:1.
Association of Official Analytical Chemists. 1995. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersdburg, MD.

STORAGE

Once opened keep powdered medium closed to avoid hydration.