



SABOURAUD DEXTROSE AGAR

TM 387

INTENDED USE

For cultivation of yeasts, molds and aciduric microorganisms

COMPOSITION

Ingredients	Gms/Ltr.
Dextrose	40.000
Agar	15.000
Peptone	10.000

PRODUCT SUMMARY AND EXPLANATION

Sabouraud Dextrose Agar is Carlier's modification of the formulation described by Sabouraud for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. George enhanced SDA with the addition of cycloheximide, streptomycin, and penicillin to produce an excellent medium for the primary isolation of dermatophytes. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens. Sabouraud Dextrose Agar is recommended by the U.S. Pharmacopeia for microbial limit tests.

PRINCIPLE

Mycological Peptone provides nitrogenous compounds. Dextrose provides an energy source. High dextrose concentration and low pH favours fungal growth and inhibits contaminating bacteria from test samples.

INSTRUCTION FOR USE

1. Dissolve 65.0 grams in 1000 ml distilled water.
2. Gently heat to boiling to dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool to 45-50°C.
5. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow colour, homogeneous free flowing powder.

Appearance of prepared medium: Light amber colour, clear to slightly opalescent gel

pH (at 25°C) : 5.6 ± 0.2



INTERPRETATION:

Cultural characteristics observed after inoculating 50-100 CFU for yeast diluted culture, incubation for 18-48 hours or up to 4 - 6 days at 25-30°C. If necessary, at 30 ± 2°C for 3 weeks. For molds, point inoculation for incubation at 25-30°C for upto 5-7 days.

Microorganisms	ATCC	*Inoculum (CFU)	Growth	Appearance of colony	Standard recovery (%)
<i>Aspergillus brasiliensis</i>	16404	Point Inoculation	Luxuriant	White mycelium, black spores	Good zone diameter
<i>Trichophyton mentagrophytes</i>	9533	Point Inoculation	Luxuriant	White to cream colour, downy to fluffy	Good zone diameter
<i>Candida albicans</i>	10231	50-100	Luxuriant	Whitish convex, entire dimorphic	≥ 70%
<i>Candida krusei</i>	6258	50-100	Luxuriant	Greyish white, flat, circular, dimorphic	≥ 70%
<i>Saccharomyces cerevisiae</i>	9763	50-100	Luxuriant	White to cream, flat, smooth, moist, glistening or dull, glabrous	≥ 70%
<i>Penicillium corylophilum</i>	20203	Point Inoculation	Luxuriant	Greyish green	Good zone diameter
<i>Trichoderma viride</i>	52440	Point Inoculation	Luxuriant	Cottony bluish-green	Good zone diameter

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

REFERENCES

1. Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
4. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Tenover FC, Tenover MC (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C.



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PRODUCT DATA SHEET

5. Georg, L. K., L. Ajello, and C. Papageorge. 1954. Use of cycloheximide in the selective isolation of fungi pathogenic to man. J. Lab Clin. Med., 44:422-428
6. Marshall, R. T. (ed.). 1993. Standard methods for the microbiological examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
7. U.S. Pharmacopeia, (1985). 21st Revision. U.S. Pharmacopeial Convention, Inc., Rockville, Maryland.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.