

CM 21531 – SABOURAUD AGAR GLUCOSE 4%

INTENDED USE

For cultivation of yeasts, moulds and aciduric microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Sabouraud Agar Glucose 4% is a modification of Sabouraud Dextrose Agar which is described by Sabouraud for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens.

Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.

COMPOSITION

Ingredients	Gms / Ltr
Peptone from casein	5.000
Peptone from meat	5.000
D(+) Glucose	40.000
Agar	15.000

PRINCIPLE

Peptone from casein and peptone from meat provides nitrogenous compounds. Glucose provides an energy source. High glucose concentration and low pH favours fungal growth and inhibits contaminating bacteria from test samples.

INSTRUCTION FOR USE

- Dissolve 65 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour in 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 incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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Aspergillus brasiliensis	16404	10-100	Luxuriant	>=70%	25-30°C	48- 72 Hours
Candida albicans	10231	10-100	Luxuriant	>=70%	25-30°C	48- 72 Hours
Escherichia coli	9002	50-100	Luxuriant (inhibited on media with lower pH)	>=70%	25-30°C	48- 72 Hours
Escherichia coli	25922	50-100	Luxuriant (inhibited on media with lower pH)	>=70%	25-30°C	48- 72 Hours
Lactobacillus casei	334	50-100	Luxuriant	>=70%	25-30°C	48- 72 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70%	25-30°C	48- 72 Hours
Trichophyton rubrum	28191	10-100	Luxuriant	>=70%	25-30°C	48- 72 Hours
Escherichia coli	8739	50-100	Luxuriant (inhibited on media with lower pH)	>=70%	25-30°C	48- 72 Hours
Trichophyton mentagrophytes	18748	10-100	Fair-good	20-40 %	25-30°C	48- 72 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10 -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.

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

DISPOSAL

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

REFERENCES

1. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
2. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C
3. Murray PR, Baren EJ, Jorgensen JH, Pfaller MA, Tenover FC, Tenover MC (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C.

