

## TM 1951 - SABOURAUD-GLUCOSE AGAR WITH ANTIBIOTICS (AGAR MEDIUM C) (as per EP/BP)

### INTENDED USE

For selective cultivation of yeasts and moulds.

### PRODUCT SUMMARY AND EXPLANATION

Sabouraud Glucose agar w/ antibiotics is cited as Medium C and recommended for cultivation of yeasts and moulds by British Pharmacopoeia. This medium was described originally by Sabouraud for the cultivation of fungi particularly useful for the fungi associated with skin infections. The medium is used with antibiotics such as tetracycline and benzylpenicillin for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria. Some pathogenic fungi may produce infective spores, which are easily dispersed in air, so examination should be carried out in safety cabinet.

### COMPOSITION

Ingredients	Gms / Ltr
Glucose monohydrate	40.000
Meat & Casein	10.000
Agar	15.000

### PRINCIPLE

Meat & casein peptone provides nitrogenous compounds. Glucose monohydrate provides an energy source. Tetracycline and benzyl penicillin inhibits a wide range of Gram-positive and Gram-negative bacteria, which makes the medium selective for fungi. The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens.

### INSTRUCTION FOR USE

- Dissolve 61.36 grams (the equivalent weight of dehydrated medium per 995 ml) in 995 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes i.e. validated cycle.
- Aseptically add dehydrated contents of one vial of Tetracycline Selective Supplement.
- Mix well before pouring 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)	: 5.40-5.80

### INTERPRETATION

Growth Promotion was carried out in accordance with the harmonized method of BP, after an incubation with added Tetracycline Selective Supplement.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Candida albicans</i>	10231	10 -100	Luxuriant ( white colonies)	$\geq 70\%$	20-25°C	$\leq 5$ days
<i>Aspergillus brasiliensis</i>	16404	10 -100	Luxuriant	$\geq 70\%$	20-25°C	$\leq 5$ days
<i>Candida albicans</i>	2091	10 -100	Luxuriant	$\geq 70\%$	20-25°C	$\leq 5$ days
<i>Saccharomyces cerevisiae</i>	9763	10 -100	Luxuriant	$\geq 70\%$	20-25°C	$\leq 5$ days
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	0 %	20-25°C	$\leq 5$ days
<i>Escherichia coli</i>	8739	$\geq 10^3$	Inhibited	0 %	20-25°C	$\leq 5$ days
<i>Escherichia coli</i>	9002	$\geq 10^3$	Inhibited	0 %	20-25°C	$\leq 5$ days
<i>Trichophyton rubrum</i>	28191	10-100	Good	40-50%	20-25°C	$\leq 5$ days
<i>Lactobacillus casei</i>	334	$\geq 10^3$	Inhibited	0 %	20-25°C	$\leq 5$ 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. Ajello L., 1957, J. Chron. Dis., 5:545.
2. British Pharmacopoeia, 2009, The Stationery Office British Pharmacopoeia
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
4. 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, 11<sup>th</sup> Edition. Vol. 1.
5. Lorian (Ed.),1980, Antibiotics in Laboratory Medicine, Williams and Wilkins, Baltimore.
6. Murray, P. R 2005, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C.
7. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.



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

**\*For Lab Use Only**  
Revision: 08 Nov., 2019