

Technical Data

Sabouraud Cycloheximide Chloramphenicol Agar

M664

Intended Use:

Recommended for selective isolation and cultivation of pathogenic fungi.

Composition**

Ingredients	g/L
Peptone	10.000
Dextrose (Glucose)	20.000
Chloramphenicol	50mg
Cycloheximide	500mg
Agar	15.000
Final pH (at 25°C)	6.8 ± 0.2

^{**}Formula adjusted, standardized to suit performance parameters

Directions

Suspend 45.54 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Caution: Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation. Some pathogenic fungi may produce infective spores, which are easily dispersed in air, so examination should be carried out in safety cabinet.

Principle And Interpretation

Sabouraud Dextrose Agar was originally formulated by Sabouraud (1) and further modified by Emmons (2) by reducing dextrose content and adjusting the pH close to neutral.

Peptone is the source of nitrogenous growth factors while dextrose provides an energy source for the growth of microorganisms. The media can be rendered selective for fungi by antibiotics such as Chloramphenicol (3) and Cycloheximide (4), which inhibit some bacteria as well as some saprophytic and pathogenic fungi. This medium inhibits fungi like *Cryptococcus neoformans*, *Aspergillus*, *Nocardia*, certain *Candida* species but allow the dermatophytes to grow well.

Type of specimen

Clinical: Skin scrapings, nail scrapings, etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

- 1. Some pathogenic fungi may produce infective spores, which are easily dispersed in air, so examination should be carried out in safety cabinet.
- 2.Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
- 3. Further biochemical and serological test must be performed for further confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

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Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of Prepared Medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.5% w/v aqueous solution at 25°C. pH: 6.8±0.2

pН

6.60-7.00

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 2-3 weeks.

Organism	Inoculum (CFU)	Growth	Recovery
Aspergillus brasiliensis ATCC 16404 (00053)	50-100	none-poor	
Candida albicans ATCC 10231 (00054*)	50-100	poor-fair	<=20%
Escherichia coli ATCC 25922 (00013*)	>=104	inhibited	0%
Saccharomyces cerevisiae ATCC 9763 (00058*)	50-100	none-poor	<=10%
Trichophyton mentagrophytes ATCC 9533	50-100	luxuriant	
<i>Trichophyton rubrum</i> ATCC 28191	50-100	luxuriant	

Key: (*) - Corresponding WDCM numbers. (#) - Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store between dehydrated and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6)

Reference

- 1. Sabouraud R., 1892, Ann. Dermatol. Syphilol., 3:1061.
- 2.Emmons C., Binford C., Uty J. and Kwon-Chung, 1970, Medical Mycology, 2nd ed., Philadelphia: Lea and Febiger.
- 3. Ajello L., 1957, J. Chron. Dis., 5:545.
- 4.MacFaddin J. F., 1985, Media For Isolation-Cultivation Identification Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
- 5. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition
- 6.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.

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HiMedia Laboratories Pvt. Limited, Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) -400604, MS, India



IVD

In vitro diagnostic medical device



Storage temperature



CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu





Do not use if package is damaged

Disclaimer:

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