

## Technical Information

### Agar Medium C (Sabouraud-Glucose Agar Medium with Chloramphenicol )

**Product Code: DM 2067B**

**Application:** - Agar Medium C is recommended for selective cultivation of yeasts and moulds in accordance with British Pharmacopoeia.

### Composition\*\*

Ingredients	Gms / Litre
Peptones (meat and casein)	10.000
Glucose monohydrate	40.000
Chloramphenicol	0.050
Agar	15.000
Final pH ( at 25°C)	5.6±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Principle & Interpretation

Sabouraud Glucose Agar Medium with Chloramphenicol is cited as Medium C and recommended for cultivation of yeasts and moulds by British Pharmacopoeia (1). This medium was formulated originally by Sabouraud (2) for the cultivation of fungi, particularly useful for the fungi associated with skin infections. The medium is often used with antibiotics such as Chloramphenicol (3) for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria. Peptones (from meat and casein) supply nitrogenous compounds. Glucose monohydrate act as an energy source. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria, which makes the medium selective for fungi (4). The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens (5).

Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

### Methodology

Suspend 65.05 grams of dehydrated media powder 1000 ml distilled water. Mix thoroughly heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. i.e validated cycle. Mix well before pouring into sterile Petri plates.

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder.

#### Gelling

Firm, comparable with 1.5% Agar gel.

#### Colour and Clarity

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

#### Reaction

pH of 6.14% w/v aqueous solution at 25°C

#### pH Range

5.40-5.80

### Growth Promotion Test

Cultural response was observed in accordance with BP, after an incubation at 20-25 °C for <=5 days. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar and fungus growth on Sabouraud Dextrose Agar.

Organism	Inoculum (CFU)	Growth	Recovery	Incubation temperature	Incubation period
<b>Cultural Response</b>					
<i>Candida albicans</i> ATCC 10231	50 -100	Luxuriant (white colonies)	>=50 %	20 -25 °C	<=5 d
<i>Aspergillus brasiliensis</i> ATCC 16404	50 -100	luxuriant	>=50 %	20 -25 °C	<=5 d
<i>Candida albicans</i> ATCC 2091	50 -100	luxuriant	>=50 %	20 -25 °C	<=5 d
<i>Saccharomyces cerevisiae</i> ATCC 9763	50 -100	luxuriant	>=50 %	20 -25 °C	<=5 d
<i>Escherichia coli</i> ATCC 25922	>=10 <sup>3</sup>	inhibited	0 %	20 -25 °C	<=5 d
<i>Escherichia coli</i> ATCC 8739	>=10 <sup>3</sup>	inhibited	0 %	20 -25 °C	<=5 d
<i>Escherichia coli</i> NCTC 9002	>=10 <sup>3</sup>	inhibited	0 %	20 -25 °C	<=5 d
<i>Trichophyton rubrum</i> ATCC 28191	50 -100	good		20 -25 °C	<=5 d
<i>Lactobacillus casei</i> ATCC 334	>=10 <sup>3</sup>	inhibited	0 %	20 -25 °C	<=5 d

**Key:** \* - Formely known as *Aspergillus niger*

## Storage and Shelf Life

**Dried Media:** Store between 15-25°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

**Prepared Media:** 2-8° in sealable plastic bags for 2-5 days.

## Further Reading

1. British Pharmacopoeia, 2009, The Stationery office British Pharmacopoeia.
2. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
3. Ajello L., 1957, J. Chron. Dis., 5:545.
4. Lorian (Ed.), 1980, Antibiotics In Laboratory Medicine, Williams and Wilkins, Baltimore.
5. Murray, P. R 2008, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C.

## Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performances parameters.