Sabouraud Chloramphenicol Agar Plate (γ-irradiated)

**Intended use**
Recommended for the selective cultivation of yeasts and moulds from clinical and non-clinical samples.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>40.000</td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>0.050</td>
</tr>
<tr>
<td>Agar</td>
<td>15.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>5.6±0.2</td>
</tr>
</tbody>
</table>

**Directions**
Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

**Caution:** 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 Chloramphenicol Agar is cited as Medium C and recommended for cultivation of yeasts and moulds. This medium was described originally by Sabouraud (7) for the cultivation of fungi, particularly useful for the fungi associated with skin infections. The medium is often used with antibiotics such as Chloramphenicol (1) for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria. Tryptone and peptone provide nitrogenous and carbonaceous compounds, long chain amino acids, and other essential growth nutrients. Dextrose provides an energy source. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria which makes the medium selective for fungi (5). The low pH favors fungal growth and inhibits contaminating bacteria from clinical specimens (6).

**Type of specimen**
Food and dairy samples.

**Specimen Collection and Handling**
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (2,8,9). After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions:**
Read the label before opening the pack. 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 specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations:**
1. Certain pathogenic fungi may show poor growth on this medium.
2. Presence of chloramphenicol may inhibit certain pathogenic fungi.
3. Overheating of the medium may result in low productivity and softening of gel.
4. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
5. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user’s unique requirement.
6. It is recommended to store the plates at 24-30°C to avoid minimum condensation.

Please refer disclaimer Overleaf.
**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.

**Quality Control**

**Appearance**
Sterile Sabouraud Chloramphenicol Agar in 90 mm disposable plates.

**Colour of medium**
Light amber coloured medium

**Quantity of medium**
30 ml of medium in 90 mm disposable plates.

**pH**
5.40-5.80

**Dose of irradiation (Kgy)**
13.00-20.00

**Sterility Test**
Passes release criteria

**Cultural Response**
Cultural characteristics observed after an incubation at 20-25°C for 48-72 hours (Incubate for 7 days for *Trichophyton* species).

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Aspergillus brasiliensis</em></td>
<td>50-100</td>
<td>good-luxuriant</td>
<td></td>
</tr>
<tr>
<td>ATCC 16404 (00053*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Candida albicans ATCC 10231</em></td>
<td>50-100</td>
<td>good-luxuriant</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>(00054*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Escherichia coli ATCC 25922</em></td>
<td>&gt;=10^4</td>
<td>inhibited</td>
<td>0%</td>
</tr>
<tr>
<td>(00013*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lactobacillus casei ATCC 334</em></td>
<td>&gt;=10^4</td>
<td>inhibited</td>
<td>0%</td>
</tr>
<tr>
<td><em>Saccharomyces cerevisiae ATCC 9763</em></td>
<td>50-100</td>
<td>good-luxuriant</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>(00058*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Trichophyton rubrum ATCC 28191</em></td>
<td>50-100</td>
<td>good-luxuriant</td>
<td></td>
</tr>
<tr>
<td><em>Escherichia coli NCTC 9002</em></td>
<td>&gt;=10^4</td>
<td>inhibited</td>
<td>0%</td>
</tr>
<tr>
<td>(00012*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Escherichia coli ATCC 8739</em></td>
<td>&gt;=10^4</td>
<td>inhibited</td>
<td>0%</td>
</tr>
</tbody>
</table>

Key : *Corresponding WDCM numbers.

**Storage and Shelf Life**
On receipt store between 20-30°C Use before expiry date on the label. 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 (3,4).

**Reference**


