HiEncap™ Potato Dextrose Agar

HiEncap™ Potato Dextrose agar is recommended for the isolation and enumeration of yeasts and moulds.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potatoes, infusion from</td>
<td>200,000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>20,000</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>

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

**Directions**

Each capsule contains 9.75 grams of medium. Suspend 1 capsule in 250 ml (4 capsules in 1000 ml) distilled or purified water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before dispensing. In specific work, when pH 3.5 is required, acidify the medium with sterile 10% tartaric acid. The amount of acid required for 100 ml of sterile, cooled medium is approximately 1 ml. Do not heat the medium after addition of the acid.

**Principle And Interpretation**

Potato Dextrose Agar is recommended by APHA (1) and F.D.A. (2) for plate counts of yeasts and moulds in the examination of foods and dairy products (3). Potato Dextrose Agar is also used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production (4). It is also recommended by USP (5), BP (6), EP (7) and JP (8) for growth of fungi.

Potato infusion and dextrose promote luxuriant fungal growth. Adjusting the pH of the medium by tartaric acid to 3.5, inhibits the bacterial growth. Heating the medium after acidification should be avoided as it may hydrolyse the agar which can render the agar unable to solidify.

**Quality Control**

**Appearance**

Gelatin capsule containing cream to yellow coloured granular media

**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

**Quantity**

Each capsule contains 9.75 grams of medium sufficient for 250 ml media

**Reaction**

pH of 3.9% w/v aqueous solution at 25°C: pH: 5.6±0.2

**pH**

5.40-5.80

**Cultural Response**

Cultural characteristics observed after incubation at 20-25 °C for 2-5 days.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
<th>Incubation temperature</th>
<th>Incubation period</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Candida albicans</em> ATCC 10231</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>&gt;=70 %</td>
<td>20-25 °C</td>
<td>2 -3 d</td>
</tr>
<tr>
<td><em>Aspergillus brasiliensis</em> ATCC 16404</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>&gt;=70 %</td>
<td>20-25 °C</td>
<td>5 -7 d</td>
</tr>
</tbody>
</table>

*Please refer disclaimer Overleaf.*
**Saccharomyces cerevisiae** ATCC 9763
50 -100 luxuriant  
>=70 %  
30 -35 °C  
2 -5 d

**Rhodotorula mucilaginosa** DSM 70403
luxuriant  
20 -25 °C  
3 -5 d

**Geotrichum candidum** DSM 1240
good- luxuriant  
25 -30 °C  
3 -5 d

**Penicillium communae** ATCC 10248
fair -good  
25 -30 °C  
3 -5 d

**Trichophyton ajelloi ATCC 28454**
fair-good  
25 -30 °C  
3 -7 d

* Key: Formerly known as *Aspergillus niger*

**Storage and Shelf Life**
Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

**Reference**

Revision : 00 / 2014

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