Potato Dextrose HiCynth™ Broth

**Intended Use:**
Recommended for cultivation and enumeration of yeasts and moulds.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiCynth™ Peptone No.7*</td>
<td>200.000</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>20.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>5.1±0.2</td>
</tr>
</tbody>
</table>

**Directions**

Suspend 24 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. 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 Broth is recommended by APHA (6) and F.D.A. (2) for plate counts of yeasts and moulds in the examination of foods and dairy products (7). Potato Dextrose HiCynth™ Broth 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 (5).

Potato Dextrose HiCynth™ Broth is prepared by replacing animal and vegetable peptones with chemically defined peptones to avoid BSE/TSE risks associated with animal peptones.

HiCynth™ Peptone No.7 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.

**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 (1,6,7). After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions**

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 specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations**

1. Further biochemical and serological tests must be carried out for complete identification.

**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**
Off-white to yellow homogeneous free flowing powder

**Colour and Clarity of prepared medium**
Light amber coloured clear to slightly opalescent solution in tubes

**Reaction**
Reaction of 2.4% w/v aqueous solution at 25°C. pH : 5.1±0.2

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*Chemically defined peptone

**Formula adjusted, standardized to suit performance parameters

Please refer disclaimer Overleaf.
pH
4.90-5.30

Cultural Response
Cultural characteristics observed after an incubation at 25-30°C for 4-5 days.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Ascospore formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspergillus brasiliensis</td>
<td>50-100</td>
<td>luxuriant</td>
<td>negative</td>
</tr>
<tr>
<td>ATCC 16404 (00053*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candida albicans ATCC 10231</td>
<td>50-100</td>
<td>luxuriant</td>
<td>negative</td>
</tr>
<tr>
<td>(00054*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saccharomyces cerevisiae</td>
<td>50-100</td>
<td>luxuriant</td>
<td>positive</td>
</tr>
<tr>
<td>ATCC 9763 (00058*)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Storage and Shelf Life
Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°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. 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 sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

Disclaimer:
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