Mycological Peptone

It is used in preparation of Fungal media - for isolation, cultivation and identification of saprophytic and dermatophytic fungi-yeasts and moulds, using acid as well as nonacid media.

Principle And Interpretation

Mycological Peptone is a mixture of animal and plant peptones required for obtaining luxuriant growth of fungi-yeasts and moulds. It is light yellow in colour and does not mask the appearance of media containing dyes and indicators. When dissolved in distilled water it produces light yellow coloured solution that remains clear even after autoclaving. It is also compatible with other media constituents and will not precipitate in media. 1.0% w/v solution of it, provides a broad spectrum of amino acids required for mycelial growth and sporulation.

Quality Control

Appearance
Light yellow to brownish yellow Homogenous Free flowing powder, having Characteristic but not putrescent odour.

Solubility
Freely soluble in distilled/purified water, insoluble in alcohol.

Clarity
1% w/v aqueous solution is clear without any haziness after autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Reaction
Reaction of 2% w/v aqueous solution at 25°C.

pH
6.50-7.50

Microbial Load:

Total aerobic microbial count (cfu/gm)
By plate method when incubated at 30-35°C for not less than 3 days.
Bacterial Count : <= 2000 CFU/gram

Total Yeast and mould count (cfu/gm)
By plate method when incubated at 20-25°C for not less than 5 days.
Yeast & mould Count : <= 100 CFU/gram

Test for Pathogens
1. E.coli-Negative in 10 gms of sample
2. Salmonella species-Negative in 10 gms of sample
3. Pseudomonas aeruginosa- Negative in 10 gms of sample
4. Staphylococcus aureus- Negative in 10 gms of sample
5. C.albicans- Negative in 10 gms of sample
6. Clostridia- Negative in 10 gms of sample

Indole Test
Tryptophan content: Passes

Cultural response
Cultural response observed after an incubation at 25-30°C for 48-72 hours by preparing Malt Extract Agar (M137) using Peptone-M as an ingredient.

Cultural Response

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Candida albicans ATCC 10231</em></td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Saccharomyces cerevisiae ATCC 9763</em></td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Aspergillus brasiliensis ATCC 16404</em></td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Chemical Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 9.50%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 2.50%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Residue on ignition</td>
<td>&lt;= 30%</td>
</tr>
</tbody>
</table>

Storage and Shelf Life

Store below 30°C. Use before expiry date on the label.