Bio Peptone  

**RM021**

It is recommended for cultivation of fastidious microorganisms and large scale production of antibiotics, enzymes & other products of microbiological origin.

**Principle And Interpretation**

Biopeptone is a mixture of enzymic digest of casein and animal tissues. It meets the nutritional requirements not supplied by meat peptone or casein hydrolysate individually. It is carefully processed to increase nutritive values to meet the growth requirements of wide variety of microorganisms. It provides a broad spectrum of peptides and amino acids and hence can be used in the manufacture of various culture media.

**Quality Control**

**Appearance**
Light yellow to brownish yellow homogenous free flowing powder, having characteristic odour but not putrescent.

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

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

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

**pH**
5.90 - 6.90

**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 : \(\leq 2000\) 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 : \(\leq 100\) CFU/gram

**Test for Pathogens**

**Indole Test**
Tryptophan Content: Passes

**Cultural response**
Cultural response observed after an incubation at 35-37°C for 18-24 hours by preparing Columbia Broth (M145) using Biopeptone as an ingredient.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Clostridium perfringens</em> ATCC 12924</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Neisseria meningitidis</em> ATCC 13090</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> ATCC 25923</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em> ATCC 19615</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Streptococcus mitis</em> ATCC 9895</td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
**Chemical Analysis**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 12.0%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 3.50%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 6.0%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Residue on ignition</td>
<td>&lt;= 12.0%</td>
</tr>
</tbody>
</table>

**Storage and Shelf Life**

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