Bio Peptone, Certified

It is recommended to be used in media for analytical microbiology and industrial fermentation.

Principle And Interpretation

Bio Peptone, Certified is manufactured by a controlled enzymatic hydrolysis of casein and animal tissue. It provides a broad spectrum of peptides and amino acids which supports better microbiological growth characteristics to a large variety of organisms.

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
6.00-7.00

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

Please refer disclaimer Overleaf.
Chemical Analysis

- Total Nitrogen: $\geq 12.0\%$
- Amino Nitrogen: $\geq 2.50\%$
- Sodium chloride: $\leq 8.0\%$
- Loss on drying: $\leq 6.0\%$
- Residue on ignition: $\leq 18\%$

Storage and Shelf Life

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