Proteose Peptone, Certified

Principle And Interpretation
Proteose Peptone, Certified is manufactured under controlled conditions carefully to retain all nutritive values. It is a mixture of peptides and free amino acids. It is employed in media used for bulk production of antibiotics, enzymes, bacterial toxins etc.

Quality Control

Appearance
Yellow to brownish yellow homogenous free flowing powder, having characteristic odour but not putrescent

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

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
6.50 - 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

Indole Test
Tryptophan content: Passes

Cultural response
Cultural response observed with added 5-7% sterile defibrinated blood after incubation at 35-37°C for 18-48 hours by preparing Blood Agar Base No. 2, using Proteose Peptone as an ingredient.

Cultural Response

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
<th>Haemolysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Staphylococcus aureus</em> ATCC 25923</td>
<td>Good-luxuriant</td>
<td>beta</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em> ATCC 19615</td>
<td>Good-luxuriant</td>
<td>beta</td>
</tr>
<tr>
<td><em>Streptococcus pneumoniae</em> ATCC 6303</td>
<td>Good-luxuriant</td>
<td>alpha</td>
</tr>
<tr>
<td><em>Neisseria meningitidis</em> ATCC 13090</td>
<td>Good-luxuriant</td>
<td>none</td>
</tr>
</tbody>
</table>
Chemical Analysis

- Total Nitrogen \( \geq 12.50\% \)
- AminoNitrogen \( \geq 3.50\% \)
- Sodium chloride \( \leq 3.88\% \)
- Loss on drying \( \leq 5.00\% \)
- Residue on ignition \( \leq 20\% \)

Storage and Shelf Life

Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.