**Protose**

**Principle And Interpretation**

It is prepared under controlled conditions by enzymatic digest of mixed proteins. It is a specially developed product which is high in proteoses. This is a light-colored peptone yielding clear solution possessing good heat stability. It is recommended for fermentation and vaccine industries. It is also used in culture media, bulk production of antibiotics, enzymes, veterinary preparation, toxins and various other products.

**Quality Control**

**Appearance**

Light yellow to brownish yellow homogenous free flowing powder, having characteristic odor but not putrescent.

**Solubility**

Soluble in distilled/purified water, insoluble in alcohol and ether.

**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**


**Indole Test**

Tryptophan Content: Passes

**Cultural response**

Cultural response observed after an incubation at 35-37°C for 18-24 hours by preparing Nutrient Agar (M001) using Protose as an ingredient.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Pseudomonas aeruginosa</em> ATCC 27853</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> ATCC 25923</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Salmonella Typhi</em> ATCC 6539</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em> ATCC 19615</td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>

*It is prepared under controlled condition by enzymatic digest of mixed proteins. It is a specially developed product which is high in proteoses. This is a light-colored peptone yielding clear solution possessing good heat stability. It is recommended for fermentation and vaccine industries. It is also used in culture media, bulk production of antibiotics, enzymes, veterinary preparation, toxins and various other products.*
### Chemical Analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 14.0%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 3.80%</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 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. Seal the container tightly after use.

---

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.