Principle And Interpretation
Tryptone, (MB grade) Casitose MB grade) is enzymic hydrolysis of milk protein. Recommended for use in media where growth of recombinant strains is desirable and for related molecular biology applications. It is very rich source of amino nitrogen. It is equivalent to Casein Enzymic Hrolysate(MB grade).

Quality Control
Appearance
Off white to light 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 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 18-48 hours by preparing Luria Agar (M557) using Tryptone (MB grade) (Casitose, MB grade) as an ingredient.

Cultural Response

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli</em> ATCC 23724</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>

Chemical Analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</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;= 5.0%</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.