Tryptone Type-II (Casitose, Type-II)  

Principle and Interpretation
Tryptone, Type-II (Casitose, Type II) is carefully manufactured under controlled conditions of enzyme hydrolysis using high quality lactose free milk protein and is equivalent to Casitone and is specially used in Antibiotic Assay Media. And is ideal in culture media wherein microbial growth is determined by optical means. Also it is a very rich source of Amino Nitrogen. It is equivalent to Casein Enzyme Hydrolysate, Type II.

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
6.20-7.20

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. Escherichia 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. Candida 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 18-48 hours by preparing Soyabean Casein Digest Medium (M011) using Tryptone Type-II (Casitose, Type-II) as an ingredient.

Cultural Response

Organism                      Growth

Bacillus subtilis ATCC 6633    characteristic, luxuriant growth
Bacillus vulgatus ATCC 8482    characteristic, luxuriant growth
Candida albicans ATCC 10231    characteristic, luxuriant growth
Staphylococcus aureus ATCC 25923 characteristic, luxuriant growth

Please refer disclaimer Overleaf.
**Streptomyces albus** ATCC 3004  
Characteristic, luxuriant growth

**Streptococcus pyogenes**  
ATCC 19615  
luxuriant w/beta haemolysis (with addition of sterile 5% sheep blood in above medium after 48 hours of incubation at 35-37°C).

**Neisseria meningitidis** ATCC 13090  
luxuriant w/beta haemolysis (with addition of sterile 10% sheep blood to above medium heated to 80 to 90°C until blood has turned to chocolate brown 10% CO₂ atmosphere after 48 hours of incubation at 35-37°C).

### Chemical Analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 12.0%</td>
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<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 3.50%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 4.0%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>&lt;= 5.0%</td>
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<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 of ignition. Seal the container tightly after use.