Fish Peptone

It is suitable for pharmaceutical and vaccine production to reduce Bovine Spongiform Encephalopathy (BSE) risk.

**Principle And Interpretation**

Fish peptone is non-mammalian peptone, used as a nitrogen source in microbiological culture media. It is a non-bovine origin peptone, free of TSE/BSE risk.

**Quality Control**

**Appearance**
Yellow to brown homogenous free flowing powder, having characteristic odour of protein.

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

**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**
6.00-7.00

**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 characteristics observed after an incubation at 35-37°C for 40-48 hours by preparing Bismuth Sulphite Agar (M027) using Fish peptone as an ingredient.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
<th>Colour of Colony</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Enterobacter aerogenes</em> ATCC 13048</td>
<td>none-poor</td>
<td>brown-green (depends on the inoculum density)</td>
</tr>
<tr>
<td><em>Enterococcus faecalis</em> ATCC 29212</td>
<td>inhibited</td>
<td></td>
</tr>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>none-poor</td>
<td>brown-green (depends on the inoculum density)</td>
</tr>
<tr>
<td><em>Salmonella Enteritidis</em> ATCC 13076</td>
<td>good-luxuriant</td>
<td>black with metallic sheen</td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Salmonella Typhi ATCC 6539
good-luxuriant black with metallic sheen
Salmonella Typhimurium ATCC 14028
good-luxuriant black with metallic sheen
Shigella flexneri ATCC 12022
none-poor brown
Escherichia coli ATCC 8739
none-poor brown to green, depends on inoculum density

Chemical Analysis
Total Nitrogen  \( \geq 12.50\% \)
Amino Nitrogen  \( \geq 3.50\% \)
Sodium chloride  \( \leq 5.0\% \)
Loss on drying  \( \leq 5.0\% \)
Residue on ignition  \( \leq 15.0\% \)

Storage and Shelf Life
Store below 30°C. Use before expiry date on the label.