Liver Extract Paste

It is recommended to be used for cultivation of fastidious bacteria and bulk production of vaccines, steroids, enzymes etc.

**Principle And Interpretation**

Liver Extract paste is obtained from fresh liver tissues of healthy animals. It is processed under controlled conditions to retain all the nutritive values of liver.

**Quality Control**

**Appearance**
Brownish yellow to brown Homogenous Viscous Paste, having Characteristic odour but not putrescent.

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

**Reaction**
Reaction of 2% w/v aqueous solution at 25°C.

**pH**
5.00-7.00

**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

**Cultural response**
Cultural response observed after an incubation at 35-37°C for 18-24 hours by preparing Liver Infusion Agar (M374) using Liver Extract Paste as an ingredient.

**Organism**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
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</thead>
<tbody>
<tr>
<td><em>Brucella melitensis</em> ATCC 4309</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Brucella suis</em> ATCC 6597</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Streptococcus mitis</em> ATCC 9895</td>
<td>Luxuriant</td>
</tr>
<tr>
<td><em>Clostridium sporogenes</em> ATCC 11437</td>
<td>Luxuriant</td>
</tr>
</tbody>
</table>
Chemical Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 6.0%</td>
</tr>
<tr>
<td>Total Solids</td>
<td>&gt;= 60.0%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 2.0%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 5.0%</td>
</tr>
<tr>
<td>Residue on ignition</td>
<td>&lt;= 10.0%</td>
</tr>
</tbody>
</table>

Storage and Shelf Life

Store below 30°C. Use before expiry date on the label.