HL Infusion Powder

Principle And Interpretation
HL Infusion Powder is prepared controlled conditions to retain all nutritive values of liver. It is recommended for bulk production of antibiotics, vaccines, enzymes and bacteriological culture media, for cultivation of fastidious organisms. It is equivalent to Liver Infusion Powder.

Quality Control

Appearance
Brownish yellow to brown homogenous free flowing powder, having characteristic odour but not putrescent.

Solubility
Freely soluble in purified/distilled 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. *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

Cultural response
Cultural response observed after an incubation at 35-37°C for 24-48 hours by preparing LI Agar (M374) using HL infusion powder, as an ingredient.

Cultural Response

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</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>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen</td>
<td>&gt;= 11.0%</td>
</tr>
<tr>
<td>Amino Nitrogen</td>
<td>&gt;= 3.50%</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>&lt;= 8.0%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>&lt;= 6.0%</td>
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<tr>
<td>Residue on ignition</td>
<td>&lt;= 12.5%</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.