HiVeg™ Peptone No. 5

It can be used for cultivation of fastidious microorganisms in Columbia Broth Base HiVeg (MV145), Dextrose HiVeg Agar (MV044), Casman HiVeg Agar (MV201) etc. Large scale production of antibiotics, enzymes and other products of microbiological origin.

**Principle And Interpretation**

HiVeg Peptone No.5 is a mixture of enzymic digests of vegetable proteins. It has high nutritive values to meet the growth requirements of wide variety of microorganisms. It can successfully replace Biopeptone (RM021).

**Quality Control**

**Appearance**
Light yellow to yellow, may have a slight green tinge Homogenous Free flowing having Characteristic odour of protein, derived from vegetable source.

**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**
5.50- 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**
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 response observed after incubation at 35 - 37°C for 18-48 hours by preparing Columbia Broth Base, HiVeg (MV145),using HiVeg Peptone No.5 as an ingredient.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Clostridium perfringens</em></td>
<td>Luxuriant</td>
</tr>
<tr>
<td>ATCC 12924</td>
<td></td>
</tr>
<tr>
<td><em>Neisseria meningitidis</em> ATCC</td>
<td>Luxuriant</td>
</tr>
<tr>
<td>13090</td>
<td></td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>Luxuriant</td>
</tr>
<tr>
<td>ATCC 25923</td>
<td></td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em></td>
<td>Luxuriant</td>
</tr>
<tr>
<td>ATCC 19615</td>
<td></td>
</tr>
<tr>
<td><em>Streptococcus mitis</em> ATCC</td>
<td>Luxuriant</td>
</tr>
<tr>
<td>9895</td>
<td></td>
</tr>
</tbody>
</table>

Please refer disclaimer Overleaf.
Chemical Analysis

- Total Nitrogen: >= 11.0%
- Amino Nitrogen: >= 3.50%
- Sodium chloride: <= 6.0%
- Loss on drying: <= 7.0%
- Residue on ignition: <= 10.0%

Storage and Shelf Life

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