Soyabean HiVeg™ Medium

**Intended Use:**
Recommended as a general purpose medium used for cultivation of a wide variety of microorganisms and recommended for sterility testing of moulds and lower bacteria. It can also be used for clinical samples.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiVeg™ hydrolysate</td>
<td>17.000</td>
</tr>
<tr>
<td>Soya peptone</td>
<td>3.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>2.500</td>
</tr>
<tr>
<td>Dipotassium hydrogen phosphate</td>
<td>2.500</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.3±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters**

**Directions**
Suspend 30.0 grams in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Mix well and dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Note: If any fibres are observed in the solution, it is recommended to filter the solution through a 0.22 micron filter to eliminate the possibility of presence of fibres.

**Principle And Interpretation**
Soyabean HiVeg™ Medium is prepared by completely replacing animal peptones with vegetable peptones to avoid BSE/TSE risks associated with animal peptones. Soyabean Casein Digest medium is recommended by various pharmacopoeia as sterility testing medium (2,6). It is used as a general purpose liquid media for cultivation of microorganisms (1,2,5,6) The combination of HiVeg™ hydrolysate and soya peptone makes this medium nutritious by nitrogenous and carbonaceous compounds, long chain amino, vitamins and other essential growth nutrients required by microorganisms. Dextrose and dipotassium phosphate serves as the carbohydrate source and the buffer in the medium. Sodium chloride maintains the osmotic balance of the medium.

**Type of specimen**
Pharmaceutical samples; Clinical samples

**Specimen Collection and Handling**
For pharmaceutical samples, follow appropriate techniques for sample collection, processing as per pharmaceutical guidelines (2,6). For clinical samples, follow appropriate techniques for sample collection and processing as per guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions**
In Vitro diagnostic Use. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations**
1. Biochemical characterization is necessary to be performed on colonies from pure cultures for further identification.
2. This medium is general purpose medium and may not support the growth of fastidious organisms.
Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Light yellow coloured clear solution without any precipitate.

Reaction
pH of 3.0% w/v aqueous solution at 25°C (after sterilization). pH : 7.3±0.2

pH
7.10-7.50

Stability test
Light yellow coloured clear solution without any precipitation or sedimentation at room temperature for 7 days

Growth promoting properties
Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating not more than 100 cfu (at 30-35°C for 18-24 hours for bacteria and 5days for fungal) Growth promotion is carried out as per USP/EP/BP/JP/IP.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Incubation period</th>
<th>Incubation temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmonella Typhimurium ATCC 14028 (00031*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Salmonella Abony NCTC 6017 (00029*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa ATCC 9027 (00026*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Streptococcus pneumoniae ATCC 6305</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Staphylococcus aureus subsp. aureus ATCC 6538 (00032*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Escherichia coli ATCC 25922 (00013*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Escherichia coli NCTC 9002</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Escherichia coli ATCC 8739 (00012*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Bacillus subtilis subsp. spizizenii ATCC 6633 (00003*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Micrococcus luteus ATCC 9341</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa ATCC 27853 (00025*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
<tr>
<td>Candida albicans ATCC 10231 (00054*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>&lt;=5 d</td>
<td>20 -25 °C</td>
</tr>
<tr>
<td>Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>18 -24 hrs</td>
<td>30 -35 °C</td>
</tr>
</tbody>
</table>

Sterility Testing- Growth promotion+Validation

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<tbody>
<tr>
<td>Staphylococcus aureus subsp. aureus ATCC 6538 (00032*)</td>
<td>50 -100</td>
<td>luxuriant</td>
<td>&lt;=3 d</td>
<td>20 -25 °C</td>
</tr>
</tbody>
</table>
### Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Use before expiry date on the label.

On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Use before expiry date on the label.

Product performance is best if used within stated expiry period.

### Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3, 4).

### Reference

2. Indian Pharmacopeia, 2018, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.

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**Key:** (#) Formerly known as Aspergillus niger, (*) Corresponding WDCM numbers
Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.