Tryptone Soya Broth

Sterility testing media also used as a general purpose medium for the growth of aerobes & fungi.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreatic digest of casein</td>
<td>17.000</td>
</tr>
<tr>
<td>Papaic digest of soyabean meal</td>
<td>3.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>2.500</td>
</tr>
<tr>
<td>Dibasic potassium 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**

**Principle And Interpretation**

Soyabean Casein Digest Medium is recommended by various pharmacopeias as a sterility testing and as a microbial limit testing medium (1, 2, 3). This medium is a highly nutritious medium used for cultivation of a wide variety of organisms (4).

The combination of pancreatic digest of casein and papaic digest of soyabean meal makes the medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Dextrose and dibasic potassium phosphate serve as the carbohydrate source and the buffer, respectively in the medium. Sodium chloride maintains the osmotic balance of the medium.

**Quality Control**

**Appearance**
Sterile Tryptone Soya Broth in a glass bottle.

**Colour**
Light yellow coloured clear solution

**Quantity of Medium**
200 ml of medium in glass bottle.

**pH**
7.10-7.50

**Growth Promotion Test**
In accordance with the harmonized method of USP/EP/BP/JP.

**Sterility Test**
Passes release criteria.

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli ATCC 25922</em></td>
<td>50 -100</td>
<td>luxuriant</td>
</tr>
<tr>
<td><em>Escherichia coli ATCC 8739</em></td>
<td>50 -100</td>
<td>luxuriant</td>
</tr>
<tr>
<td><em>Escherichia coli NCTC 9002</em></td>
<td>50 -100</td>
<td>luxuriant</td>
</tr>
<tr>
<td><em>Salmonella Abony NCTC 6017</em></td>
<td>50 -100</td>
<td>luxuriant</td>
</tr>
</tbody>
</table>
Salmonella Typhimurium ATCC 14028
50 -100 luxuriant

Bacillus subtilis ATCC 6633 50 -100 luxuriant

Staphylococcus aureus ATCC25923
50 -100 luxuriant

Staphylococcus aureus ATCC 6538
50 -100 luxuriant

Micrococcus luteus ATCC 9341
50 -100 luxuriant

Streptococcus pneumoniae ATCC 6305
50 -100 luxuriant

Pseudomonas aeruginosa ATCC 27853
50 -100 luxuriant

Pseudomonas aeruginosa ATCC 9027
50 -100 luxuriant

Growth at 20-25°C for <= 5 days

Candida albicans ATCC10231
50 -100 luxuriant

Candida albicans ATCC 2091
50 -100 luxuriant

*Aspergillus brasiliensis ATCC 16404
50 -100 luxuriant

Storage and Shelf Life
Store between 15-25°C. Use before expiry date on the label.

Reference
3. Indian Pharmacopeia, 2010, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.

Revision : 1 / 2011