**Tryptone Soya Yeast Extract Broth**

**Intended Use:**
Recommended for confirmation of *Listeria* in Henry’s light.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</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>Dipotassium hydrogen phosphate</td>
<td>2.500</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>2.500</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>6.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.3±0.2</td>
</tr>
</tbody>
</table>

**Directions**
Suspend 36 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

**Principle And Interpretation**

Tryptone Soya Yeast Extract Broth is formulated as per APHA (6) for the isolation and cultivation of *Listeria monocytogenes* from foods. ISO Committee (3) has recommended for the cultivation and maintenance of a wide variety of heterotrophic microorganisms (1).

Tryptone and soya peptone provide nitrogenous and carbonaceous compounds, long chain amino acids and other essential nutrients. Dextrose is the energy source. Dipotassium hydrogen phosphate acts as buffering system to control pH. Yeast extract is the rich source of vitamin B complex.

According to FDAs enrichment procedure (2) for isolation of *Listeria monocytogenes* from dairy products, the sample to be tested is inoculated in enrichment broth and incubated at 30°C for 24-48 hour.

**Type of specimen**
Food and dairy samples

**Specimen Collection and Handling:**

According to FDAs enrichment procedure (2) for isolation of *Listeria monocytogenes* from dairy products, the sample to be tested is inoculated in enrichment broth and incubated at 30°C for 24-48 hours.

**Warning and Precautions :**
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 specimens. Safety guidelines may be referred in individual safety data sheets

**Limitations :**
1. Further confirmation of organisms on selective media is required.

**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**
Yellow coloured clear solution in tubes.

**Reaction**
Reaction of 3.6% w/v aqueous solution at 25°C. pH : 7.3±0.2

**pH**
7.10-7.50

**Cultural Response**
Cultural characteristics observed after an incubation at 30-37°C for 24-48 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listeria monocytogenes ATCC 19117</td>
<td>50-100</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td>Listeria monocytogenes ATCC 19111 (00020*)</td>
<td>50-100</td>
<td>good-luxuriant</td>
</tr>
<tr>
<td>Listeria monocytogenes ATCC 19118</td>
<td>50-100</td>
<td>good-luxuriant</td>
</tr>
</tbody>
</table>

Key : *Corresponding WDCM numbers.

**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 inorder 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 (4,5).

**Reference**