Standard Plate Count Medium (without Membrane Filter)  

(Economy Pack)  

For total bacterial detection and enumeration.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casein enzymic hydrolysate</td>
<td>5.000</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>2.500</td>
</tr>
<tr>
<td>Dextrose</td>
<td>1.000</td>
</tr>
</tbody>
</table>

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

**Directions**

The test sample should be filtered through a sterile membrane filter having pore size of 0.22µ/0.45µ. Rehydrate the nutrient pad with 2.0-2.5 ml sterile distilled / purified water. After filtration, remove the membrane filter aseptically using sterile forceps. Place the membrane filter on rehydrated nutrient pad. Incubate the inoculated nutrient. Interpret the results qualitatively by observing the presence or absence of growth and quantitatively by counting the number of colonies on the surface of the membrane filter and calculating CFU/ml.

**Principle And Interpretation**

Field of Application: Water, milk, food and other samples, waste water, beverages. DriFilter Membrane Nutrient Pad Medium is ready to use sterile culture media in the form of a 50 mm biological inert absorbent pads impregnated with Plate Count medium, then dried and sterilized in 55 mm petri plate. They eliminate the need of laborious media preparation and autoclaving procedures. The nutrient pads are to be just rewetted with sterile distilled water and are ready to use. Use of nutrient pads allows larger sample volumes to be tested at a time. Interpretation of results is directly by counting the CFUs and also quantifies the microbial load present in the sample. Plate Count medium is formulated as described by Buchbinder et al (1) which is recommended by APHA (2,3,4) and FDA (5). Casein enzymic hydrolysate provides amino acids and other complex nitrogenous substances. Yeast extracts supplies Vitamin B complex. [APHA recommends the use of pour plate technique. The samples are diluted and appropriate dilutions are added in Petri plates. Sterile molten agar is added to these plates and plates are rotated gently to ensure uniform mixing of the sample with agar. The poured plate count method is preferred to the surface inoculation method, since it gives higher results. Plate Count Agar is also suitable for enumerating bacterial count of sterile rooms.]

**Quality Control**

**Appearance**

Dry filter membrane pad of 50mm diameter

**Colour**

Pale coloured nutrient pad

**Sterility test**

Passes release criteria

**Cultural response**

Cultural characteristics observed after incubation at 35-37ºC for 18-48 hours

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
<th>Colour of colony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escherichia coli ATCC 25922</td>
<td>Luxuriant</td>
<td>Colourless</td>
</tr>
<tr>
<td>Staphylococcus aureus ATCC 25923</td>
<td>Luxuriant</td>
<td>Colourless</td>
</tr>
<tr>
<td>Enterococcus faecalis ATCC 29212</td>
<td>Luxuriant</td>
<td>Colourless</td>
</tr>
</tbody>
</table>
Storage and Shelf Life
Store between 10-30°C. Use before expiry date on the label.

Reference