Saline Meat Yeast Agar (Revised as Saline M Yeast Agar)  
M1777

**Intended Use:**
Recommended as an identification media for *Vibrio parahaemolyticus* from food products or animal feeding products.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peptone</td>
<td>10.000</td>
</tr>
<tr>
<td>HM extract #</td>
<td>2.000</td>
</tr>
<tr>
<td>Yeast Extract</td>
<td>6.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>30.000</td>
</tr>
<tr>
<td>L-Cysteine hydrochloride</td>
<td>0.300</td>
</tr>
<tr>
<td>Dextrose (Glucose)</td>
<td>2.000</td>
</tr>
<tr>
<td>Agar</td>
<td>8.000</td>
</tr>
<tr>
<td>pH after sterilization (at 25°C)</td>
<td>7.50</td>
</tr>
</tbody>
</table>

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

#- Equivalent to Meat extract

**Directions**

Suspend 58.30 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Mix well and dispense in quantities of 4ml into test tubes (9mm x 180mm). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. 

Cool to 45-50°C.

Note: Just before use, heat the test tubes on a boiling water-bath or in flowing steam for 10 min, and then cool rapidly to about 45°C.

**Principle And Interpretation**

*Vibrio parahaemolyticus* is a halophilic estuarine organism. This organism can be isolated from a variety of sea food product and marine environments. The organism, when isolated from fresh sea food, is usually found in low number and is sensitive to refrigeration and heat. It is in accordance with ISO 8914: 1990 (2) recommended for detection of *Vibrio parahaemolyticus* present in food samples. Peptone, HM extract and yeast extract provide nitrogenous compounds, trace elements and vitamin B complex required for growth of *Vibrio*. High concentration of sodium chloride and alkaline pH of the medium provides condition that facilitates easy recovery of *V. parahemolyticus* and restrict the growth of other contaminating bacteria. Glucose is the fermentable sugar. Cysteine hydrochloride help in maintaining reduced atmosphere in the medium.

Inoculate a well defined isolated colony from Saline Nutrient Agar (M1776) to molten regenerated and cooled (45°C) Saline Meat Yeast Agar (M1777) throughout its depth without introducing air bubbles. Immediately immerse the tubes in cold water to solidify the medium. Incubate at 35-37°C for 24 hrs and examine the growth. *Vibrio parahemolyticus* exhibits both aerobic and anaerobic growth with no gas production.

**Type of specimen**

Food and dairy samples.

**Specimen Collection and Handling:**

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (1,5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

**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. 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 to slightly opalescent gel forms in the tubes

**Reaction**
Reaction of 5.83% w/v aqueous solution after sterilization at 25°C. pH : 7.50

**pH**
7.50

**Cultural Response**
Cultural characteristics observed after an incubation at 35-37°C for 24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Vibrio parahaemolyticus</em> ATCC 17802 (00037*)</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 20-30°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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

**Reference**

Revision :02 / 2019

**Disclaimer :**
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