Lactose Gelatin Medium, Modified

Lactose Gelatin Medium, Modified is recommended for detection and enumeration of *Clostridium perfringens* from food samples.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptose</td>
<td>15.000</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>10.000</td>
</tr>
<tr>
<td>Lactose</td>
<td>10.000</td>
</tr>
<tr>
<td>Gelatin</td>
<td>120.000</td>
</tr>
<tr>
<td>Phenol red</td>
<td>0.050</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.5±0.2</td>
</tr>
</tbody>
</table>

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

**Directions**

Suspend 15.5 grams in 100 ml warm distilled water. Heat to boiling to dissolve the medium completely and dispense 10 ml amounts in 15X150 mm screwcapped tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Just before use, heat to boiling to remove dissolved oxygen and cool rapidly to incubation temperature.

**Principle And Interpretation**

The Lactose Gelatin Medium, Modified was prepared in accordance with APHA and is recommended by F.D.A for detection and colony count of *Clostridium perfringens* in foods. This formulations is also recommended by ISO committee for enumeration of *Clostridium perfringens* (3).

Tryptose and yeast extract provide essential growth nutrients. Lactose is the fermentable sugar and phenol red acts as fermentation indicator which changes from red to yellow due to acid production.

The tube is chilled for 1 hour at 5°C, if medium gels, it should be incubated for an additional 24 hours to examine gelatin liquefaction. The medium is stab inoculated with pure fluid thioglycollate medium culture or isolates from Tryptose sulphite cycloserine (TSC) agar plate.

**Quality Control**

**Appearance**

Beige to reddish pink homogeneous coarse powder

**Gelling**

Semisolid, comparable with 12% Gelatin gel.

**Colour and Clarity of prepared medium**

Red coloured clear to slightly opalescent gel forms in tubes

**Reaction**

Reaction of 15.5% w/v aqueous solution at 25°C. pH : 7.5±0.2

**pH**

7.30-7.70

**Cultural Response**

Cultural characteristics observed after an incubation at 30 - 35°C for 24 - 48 hours .

**Cultural Response**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Growth</th>
<th>Gelatin liquefaction</th>
</tr>
</thead>
</table>

Please refer disclaimer Overleaf.
Clostridium perfringens
ATCC 13124

Clostridium
perfringens ATCC 12924

Storage and Shelf Life
Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

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.