Casitose Broth, Modified

Intended Use:
Used as a general purpose medium.

Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casitose</td>
<td>5.000</td>
</tr>
<tr>
<td>HM infusion from</td>
<td>150.000</td>
</tr>
<tr>
<td>HM peptone</td>
<td>5.000</td>
</tr>
<tr>
<td>Yeast autolysate</td>
<td>1.500</td>
</tr>
<tr>
<td>Sodium phosphate</td>
<td>2.500</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>5.000</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.8±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters

Directions
Suspend 20.5 grams in 1000 ml purified / distilled water containing 22 ml glycerol. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation
Casitose Broth, Modified is used as a general purpose culture medium. General purpose media are basic culture media used for maintaining microorganisms, cultivating fastidious organisms by enriching with serum or blood and are also used for purity checking prior to biochemical or serological testing (5,6).

It has Casitose, HM infusion from and HM peptone which serves as a rich source of nitrogen and carbon. Yeast autolysate provides necessary growth factors and vitamin supplements required for metabolism of wide number of bacteria. Sodium phosphate helps buffering of media whereas sodium chloride balances the osmotic equilibrium.

Type of specimen
Food and dairy samples; Water samples

Specimen Collection and Handling
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (1,7,8). For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.(2)

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 biochemical and serological tests must be carried out for further identification.

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 coloured homogeneous free flowing powder

**Colour and Clarity of prepared medium**
Light to medium amber coloured clear to slightly opalescent solution with slight precipitate.

**Reaction**
Reaction of 2.05% w/v aqueous solution at 25°C. pH : 7.8±0.2

**pH**
7.60-8.00

**Cultural Response**
Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Escherichia coli</em> ATCC 25922</td>
<td>50-100</td>
<td>luxuriant</td>
</tr>
<tr>
<td>(00013*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> subsp.</td>
<td>50-100</td>
<td>luxuriant</td>
</tr>
<tr>
<td><em>aureus</em> ATCC 25923 (00034*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em></td>
<td>50-100</td>
<td>luxuriant</td>
</tr>
<tr>
<td>ATCC 19615</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key : *Corresponding WDCM numbers.

**Storage and Shelf Life**
Store below 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 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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