Hartley Broth w/ 0.05% SPS

**Intended use**

For the recovery of anaerobic and facultative microorganisms. *sterile, in bottles*.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>HM hydrolysate</td>
<td>29.000</td>
</tr>
<tr>
<td>Sodium polyanethol sulphonate (SPS)</td>
<td>0.500</td>
</tr>
<tr>
<td>Final pH (at 25°C)</td>
<td>7.6±0.2</td>
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</tbody>
</table>

# Equivalent to Tryptic digest of heart muscle

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

Label the ready to use blood culture bottle. Do not unscrew cap. Remove the top of the screw cap. Disinfect the part of the rubber stopper which is now exposed. Draw patient's blood with the sterile or disposable needle and syringe as explained in specimen collection and disposable column. Transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood. Venting: Use sterile venting needle (LA038). Keep the bottle in an upright position preferably in a biological safety cabinet, place an alcohol swab over the rubber stopper and insert the venting needle with filter through it. Insertion and withdrawal of the needle should be done in a straight line. Discard the needle and mix the contents by gently inverting the bottle 2-3 times. Do Not vent the bottle for anaerobic cultures. Incubate at 35±2°C for 18-24 hours and further for seven days.

**Principle And Interpretation**

Hartley (6) described the value of HM hydrolysate for the production of diphtheria toxin. Since then it is used as a general-purpose broth, capable of initiating the growth of demanding (fastidious) organisms from a small inocula. SPS acts as an anticoagulant and as an inhibitor of the bacteriostatic and bactericidal effects of blood cells and plasma factors (1,4). Hartleys Digest Broth can be used for the recovery of fastidious organisms such as Group A, C, G Streptococci and *Streptococcus pneumoniae* from small inocula. Douglas (3) used the same medium to recover *Corynebacterium diphtheriae*, while Monckton (8) used it in an enrichment medium for *C. diphtheriae*. Hartleys Digest Broth may be used for cultivation of blood samples, sterility testing, production of diphtheria toxin etc.

**Type of specimen**

Clinical sample: Blood

**Specimen Collection and Handling**

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,7). After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions**

In Vitro diagnostic use only. 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 clinical specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations**

1. Further biochemical and serological testing is required for complete 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
Sterile clear Hartley Broth w/ 0.05% SPS in glass bottle.

Colour
Light yellow coloured clear solution

Quantity of Medium
70 ml of medium in glass bottle. (For Adult Use )

Reaction
7.40- 7.80

Sterility test
Passes release criteria

Cultural response
Cultural characteristics was observed after incubation at 35-37°C for 24-48 hours.

Organism Growth
Streptococcus pneumoniae Luxuriant
ATCC 6303
Streptococcus pyogenes Luxuriant
ATCC 19615
Staphylococcus aureus Luxuriant
subsp. aureus ATCC 25923 (00034*)

Corynebacterium Luxuriant
diphtheriae ATCC 11913

Key : (*) Corresponding WDCM numbers

Storage and Shelf Life
On receipt store between 15-25°C. 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 (5,7).

Reference