

## TMK 374– HARTLEY DIGEST BROTH

### INTENDED USE

For isolation of various bacteria from blood especially Streptococci and *Corynebacterium diphtheriae*

### PRODUCT SUMMARY AND EXPLANATION

HARTLEY'S DIGEST BROTH is used for cultivation of various bacteria from blood especially of Streptococci and *Corynebacterium diphtheriae*. Hartley's Digest Broth is prepared as per the method described by Cruickshank by the tryptic digestion of de-fatted, fresh ox-heart under controlled conditions. Hartley described the value of tryptic digest of muscle 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. Hartley's Digest Broth can be used for the recovery of fastidious organisms such as Group A, C, G Streptococci and *Streptococcus pneumoniae* from small inocula.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptic digest of heart muscle	29.000

### PRINCIPLE

The Medium contains Tryptic digest of heart muscle which acts a source of nutrition for bacterial growth.

### INSTRUCTION FOR USE

1. Remove the plastic cap and disinfect the part of the rubber stopper which is now exposed.
2. Draw patient's blood with the sterile needle and syringe and transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood.
3. Venting may be required for aerobic culture and not in case of anaerobic cultures.
4. Incubate at 35-37°C for 24-48 hours and further for 7 days to confirm negative results.

Note: Hartley Digest Broth is a ready to use liquid media in glass bottle. The medium is pre-sterilized, hence sterilization is not required.

### QUALITY CONTROL SPECIFICATIONS

Appearance of the medium	:	Light Yellow colored, clear solution.
Quantity of Medium	:	25ml / 50ml of the medium in glass bottle
pH (at 25°C)	:	7.6 ± 0.2
Sterility Check	:	Passes release criteria

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Corynebacterium diphtheriae</i>	11913	50-100	Luxuriant	35-37°C	24-48 hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	35-37°C	24-48 hours
<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	35-37°C	24-48 hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Luxuriant	35-37°C	24-48 hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	35-37°C	24-48 hours



**PACKAGING:**

Aluminium capped bottles containing 25ml (Paediatric) or 50 ml (Adult) media.

**STORAGE**

On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from unopened packages can be used up to the expiration date. Opened bottles must be used immediately.

**Product Deterioration:** Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

**DISPOSAL**

After use, prepared media, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

1. Cruickshank R., 1962, "Mackie and McCartneys Handbook of Bacteriology" 10th Ed., Livingstone Ltd., Edinburgh and London, pp. 192.
2. Douglas S. R., 1922-23, Brit. J. Expt. Pathol., 3:263.
3. Hartley P., 1922, J. Path. Bact., 25:479.
4. Monckton J. C., 1947, Bull Inst. Med. Lab. Technol., 13(1):2.



**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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