



# TMK 374S- HARTLEY DIGEST BROTH W/ 0.5% SPS

## **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		
Sodium polyanethol sulphonate	0.500		

## PRINCIPLE

The Medium contains Tryptic digest of heart muscle which acts a source of nutrition for bacterial growth. Sodium polyanethol sulfonate (SPS) is an anticoagulant and a surface-active agent which is widely employed as an additive to fluid blood culture media. It is generally considered to enhance the rate and speed of bacterial isolations by counter-acting the bacterial inhibitors of human blood. SPS is known to neutralize the bactericidal activity of fresh human serum and to inhibit phagocytosis

# **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 W/ 0.5% SPS is a ready to use liquid media in glass bottle. The medium is pre-sterilized, hence sterilization is not required.

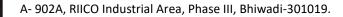
# QUALITY CONTROL SPECIFICATIONS

Appearance of the medium	:	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	lnoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Corynebacterium diphtheriae	11913	50-100	Luxuriant	35-37°C	24-48 hours
Enterococcus faecalis	29212	50-100	Luxuriant	35-37°C	24-48 hours



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# **PRODUCT DATA SHEET**

Staphylococcus aureus	25923	50-100	Luxuriant	35-37°C	24-48 hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	35-37°C	24-48 hours
Streptococcus pyogenes	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.

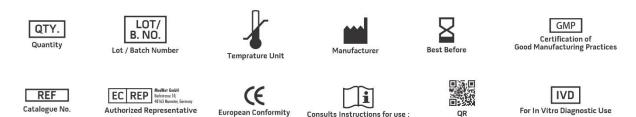
**Product Deterioration:** Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

#### 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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A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.