Hartley's Digest Broth

Intended Use
Hartley's Digest Broth is recommended as general-purpose medium for the cultivation of a wide variety of bacteria from blood especially fastidious Streptococci and *Corynebacterium diphtheriae*.

Summary
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. Douglas used the same medium to recover *Corynebacterium diphtheriae*, while Monckton used it in an enrichment medium for *C. diphtheriae*. Hartley's Digest Broth may be used for cultivation of blood samples, sterility testing, production of diphtheria toxin etc.

Principle
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.

Formula*
Ingredients	**g/L**
Tryptic Digest of Heart muscle	29.0
Final pH (at 25°C)	7.6 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Clinical samples – Blood
Pharmaceutical samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 29.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Heat if necessary, to dissolve the powder completely.
4. Dispense as desired and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Light yellow to amber coloured, clear solution without any precipitate.
Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

Organism (ATCC)	Growth
Streptococcus pneumoniae (6305)	Good
Streptococcus pyogenes Strain Bruno (19615)	Good
Staphylococcus aureus subsp. *aureus* (6538)	Good
Staphylococcus aureus subsp. *aureus* (25923)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

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

Product Presentation:

Cat No.	Product description	Pack Size
201080010500	Dehydrated Culture Media	500 g
203080050005	Ready Prepared Tube	50 x 5 mL
203080050020	Ready Prepared tube	10 x 20 mL
203080050070	Ready Prepared tube	10 x 70 mL