



PRODUCT SPECIFICATION SHEET

Hartley's Digest Broth (DM303)

Intended Use

Hartley's Digest Broth (DM303) is recommended for cultivation of a wide variety of bacteria, especially fastidious *Streptococci* and *Corynebacterium diphtheriae*, from blood.

Product Summary and Explanation

For the production of diphtheria toxin, Hartley⁽¹⁾ described the value of tryptic digest of muscle. 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⁽²⁾ used the same medium to recover *Corynebacterium diphtheriae*, while Monckton⁽³⁾ 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.

Principles of the Procedure

Hartley's Digest Broth is prepared as per the method described by Cruickshank⁽⁴⁾ by the tryptic digestion of de-fatted, fresh ox-heart under controlled conditions, which helps the bacterial metabolism.

Formula / Liter

Ingredients	Gms / Liter
Tryptic digest of heart muscle	29.00
Final pH: 7.6 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 29 grams of the medium in one liter of distilled water.
2. Heat if necessary to dissolve the medium completely.
3. Dispense as desired.
4. Autoclave at 121°C, 15 psi pressure, for 15 minutes / validated cycle.

Quality Control Specifications

Dehydrated Appearance	Cream to yellow homogeneous free flowing powder
Prepared Medium	Light yellow coloured, clear solution without any precipitate
Reaction of 2.9% solution	pH 7.6 ± 0.2 at 25°C
Gel Strength	Not Applicable

Expected Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Sr.	Organisms	Results to be achieved
-----	-----------	------------------------





PRODUCT SPECIFICATION SHEET

No.		Inoculum (CFU)	Growth
1.	<i>Corynebacterium diphtheriae</i> ATCC 11913	50-100	good-luxuriant
2.	<i>Enterococcus faecalis</i> ATCC 29212	50-100	good-luxuriant
3.	<i>Staphylococcus aureus</i> ATCC 25923	50-100	good-luxuriant
4.	<i>Streptococcus pneumoniae</i> ATCC 6303	50-100	good-luxuriant
5.	<i>Streptococcus pyogenes</i> ATCC 19615	50-100	good-luxuriant

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer to appropriate references for standard test procedures.

Results

Refer to appropriate references and standard test procedures for interpretation of results.

Storage

Store the sealed bottle containing the dehydrated medium at 10 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure

1. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
2. Consult appropriate texts for detailed information and recommended procedures.

Packaging

Product Name : Hartley's Digest Broth

Product Code : DM303

Available Pack sizes : 100gm/500gm

References

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.

Further Information

For further information please contact your local MICROMASTER Representative. 5





PRODUCT SPECIFICATION SHEET

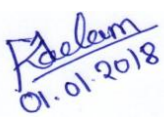




MICROMASTER LABORATORIES PRIVATE LIMITED

DM303PSS,QAD/FR/024,Rev.00/01.01.2018

Unit 38/39, Kalpataru Industrial Estate,
Off G.B. Road, Near 'R-Mall', Thane (W) - 400607. M.S. INDIA.
Ph: +91-22-25895505, 4760, 4681. Cell: 9320126789.

Email: micromaster@micromasterlab.com
sales@micromasterlab.com

Prepared By	Checked By	Approved By
 01.01.2018	 01.01.2018	 01.01.2018
Microbiologist	Head Quality Control	Head Quality Assurance

Disclaimer :

All Products conform exclusively to the information contained in this and other related Micromaster Publications. Users must ensure that the product(s) is appropriate for their application, prior to use. The information published in this publication is based on research and development work carried out in our laboratory and is to the best of our knowledge true and accurate. Micromaster Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are intended for laboratory, diagnostic, research or further manufacturing use only and not for human or animal or therapeutic use, unless otherwise specified. Statements included herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

