



Slanetz and Bartley medium w/o TTC

M612A

Intended Use:

Recommended for detection and enumeration of faecal Streptococci by membrane filtration technique from water and food samples. It can also be used for clinical samples.

Composition**

Ingredients	Gms / Litre
Tryptose	20.000
Yeast extract	5.000
Dextrose (Glucose)	2.000
Disodium hydrogen phosphate	4.000
Sodium azide	0.400
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 46.4 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE OR OVERHEAT. Excessive heating is detrimental. If desired add sterile 1% TTC solution (FD057) to the medium.

Principle And Interpretation

Slanetz and Bartley Medium was originally devised by Slanetz and Bartley (7) for the detection and enumeration of Enterococci by membrane filtration technique. It can be also used as a direct plating medium (1,6). M612A media formulation is devoid of triphenyl tetrazolium chloride that is present in M612.

Tryptose and yeast extract serves as the source of essential nutrients to the organisms. The medium is highly selective for Enterococci. Sodium azide has inhibitory effect on gram-negative organisms. If Triphenyl Tetrazolium Chloride(TTC) is added to the medium, it is reduced to the insoluble formazan inside the bacterial cell forming dark red-coloured colonies. When the medium is incubated at higher temperature (44-45°C), all red or maroon colonies can be considered as presumptive Enterococci (5,8).

The Department of Health (2) has recommended similar medium with TTC to be used for enumeration of Enterococci in water supplies.

Type of specimen

Food samples; Water samples, Clinical samples

Specimen Collection and Handling:

For water samples: Water is filtered through a membrane filter, which is then placed on the surface of the Slanetz and Bartley Medium plates and incubated at 35°C for 4 hours and then at 44-45°C for 44-48 hours. Red or maroon colonies are counted as Enterococci. The preliminary incubation at 35°C helps for the recovery of stressed organisms. Not all the species reduce TTC; hence pale colonies also should be considered.

For analyzing food samples, it is homogenized and diluted with normal saline to give countable 15-150 colonies on each Petri plate when spread on agar surface and incubated at 35°C for 48 hours. Pink or dark red colonies with a narrow whitish border are counted (6).

Warning and Precautions

In Vitro Diagnostic use. 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 specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical testing is required for identification of species.

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

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.64% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours with added TTC solution (FD057).

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Escherichia coli</i> ATCC 25922 (00013*)	>=10 ⁴	inhibited	0%	
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50-100	good-luxuriant	>=50%	red or maroon

Key: (*) Corresponding WDCM numbers

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. 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 (3,4).

Reference

1. Burkwall M.K. and Hartman P.A., 1964, Appl. Microbiol., 12:18.
2. Department of Health and Social Security, 1982, Report 71, HMSO, London.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. Mead G.C., 1966, Proc. Soc. Wat. Treat. Exam.,15:207.
6. Nordic Committee on Food Analysis, 1968, Leaflet 68.
7. Slanetz L. W. and Bartley C.H., 1957, J. Bact., 74:591.

8. Taylor E.W. and Burman N.P., 1964, J. Appl. Bact., 27:294.

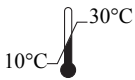
Revision : 02/2020



In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Pvt. Limited,
23 Vadhani Industrial Estate,
LBS Marg, Mumbai-86, MS, India



CE Partner 4U ,Esdoornlaan 13, 3951
DB Maarn The Netherlands,
www.cepartner4u.eu

Disclaimer :

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