

Thioglycollate Broth

LQ007

Intended Use

Recommended for the recovery of anaerobic and facultative microorganisms. *Sterile, in glass bottles.*

Composition**

Ingredients	Gms / Litre
Tryptone	15.000
Yeast extract	5.000
Dextrose (Glucose)	5.500
Sodium chloride	2.500
L-Cystine	0.500
Sodium thioglycollate	0.500
Final pH (at 25°C)	7.1±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Label the ready to use blood culture bottle. Remove the Aluminium foil cap. Disinfect the part of the rubber stopper which is now exposed. Draw patient's blood with the sterile or disposable needle and syringe as explained in specimen collection and disposable column. Transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood. Venting: Use sterile venting needle (LA038). Keep the bottle in an upright position preferably in a biological safety cabinet, place an alcohol swab over the rubber stopper and insert the venting needle with filter through it. Insertion and withdrawal of the needle should be done in a straight line. discard the needle and mix the contents by gently inverting the bottle 2-3 times. Do Not vent the bottle for anaerobic cultures. Incubate at 35±2°C for 18-24 hours and further for seven days.

Principle And Interpretation

Thioglycollate Medium is formulated as described in the N.I.H. memorandum (5). It is used for the sterility testing of certain biological products which are turbid or viscous. Both the media have similar composition, except agar and resazurin that are not included in Alternative Thioglycollate Medium. This deletion makes it suitable for sterility testing of viscous products. Tryptone serves as a source of nitrogen and carbon compounds, long chain amino acids and other essential nutrients. Yeast extract serve as source of essential nutrients to the contaminants, if present. Dextrose serves as the energy source. Sodium chloride maintains the osmotic equilibrium of the medium whereas L-cystine, an amino acid, also serves as source of essential growth factors. Sodium thioglycollate and L-cystine lower the oxidation-reduction potential of the medium by removing oxygen to maintain a low Eh. Sodium thioglycollate also helps to neutralize the toxic effects of mercurial preservatives (6,7).

Type of specimen

Clinical : wound swabs, skin swabs or scrapings, tooth tartar etc. Pharmaceutical: Sterility testing of viscous products.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2).

For pharmaceutical products, follow appropriate techniques for sample processing in case of viscous materials as mentioned under sterility. (8)

Warning and Precautions

In Vitro diagnostic use only. 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 clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Proper anaerobic conditions must be maintained for optimal recovery of organisms

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

Sterile, clear Schaedler Broth in glass bottle.

Colour

Yellow coloured clear solution

Quantity of Medium

20ml of medium in glass bottle. (Volume of blood for paediatrics use - 1 to 3 ml)

Reaction

7.40- 7.80

Sterility test

Passes release criteria

Cultural response

Cultural characteristics was observed after incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth under anaerobic conditions	Growth under aerobic conditions
<i>Bacteroides fragilis</i> ATCC 25285	50-100	luxuriant	-
<i>Clostridium butyricum</i> ATCC 13732	50-100	luxuriant	-
<i>Clostridium perfringens</i> ATCC 12924	50-100	luxuriant	-
<i>Clostridium sporogenes</i> ATCC 11437	50-100	luxuriant	-
<i>Escherichia coli</i> ATCC 25922 (00013*)	$\geq 10^4$	luxuriant	-
<i>Streptococcus pyogenes</i> ATCC 19615	50-100	-	luxuriant

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 15-25°C. Use before expiry date on the label.
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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Fass R.J., Prior R.B. and Rotilie C.A., 1975, Antimicrob. Agents Chemother., 8:444.
2. Garrod, 1966, J. Pathol. Bacterial., 91:621.
3. Isenberg (Ed.), 1992, Clinical Microbiology Procedures Handbook, American Society for Microbiology, Washington, D.C.
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. Lawrence and Traub, 1969, Appl. Microbiol, 17:839.
6. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. I. Williams and Wilkins, Baltimore.
7. Mata L.J., Carrillo C. and Villatoro E., 1969, Appl. Microbiol, 17:596.
8. Schaedler R.W., Dubos R. and Castello R., 1965, J. Exp. Med., 122:59.
9. Stalons D.R., Thornsberry C. and Dowel V.R., 1974, Appl. Microbiol, 27:1098.
10. Rosner, 1968, Am. J. Clin. Pathol. 49:216.

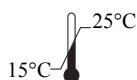
Revision : 00 / 2019



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.