


Also known as

USP Alternative Thioglycolate Medium

Specification

Medium used for the cultivation of anaerobic pathogenic microorganisms in clinical specimens and in sterility test of viscous or cloudy products.

Formula * in g/L

Peptone from casein.....	15,0
Yeast extract.....	5,0
Dextrose.....	5,5
Sodium chloride.....	2,5
Sodium thioglycolate.....	0,5
L-Cystine.....	0,5

Final pH 7,1 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 29 g of powder in 1 L of distilled water, heating if necessary to dissolve. Distribute into suitable containers and sterilize in the autoclave at 121°C for 15 minutes. This culture medium should always be freshly prepared or heated at 100°C for 10 minutes before use.

Description

Thioglycolate Broth also known as Alternative Thioglycolate Medium was formulated and recommended by the USP, NF, NIH and FDA.

It is used for sterility testing of biological products or samples of turbid appearance where Fluid Thioglycolate Medium is not suitable because of its viscosity. The formula of Thioglycolate Broth is the same as Thioglycolate USP Fluid Medium without resazurin and agar. The media must be freshly prepared, boiled, sterilised, cooled and used within 4 hours.

Quality control
Incubation temperature: 30-35°C

Incubation time: 24-72h

Inoculum: Practical range 50-100 CFU. (Productivity) according to Eur. Pharm. harm.

Microorganism
Growth
Remarks
Staphylococcus aureus ATCC® 6538

Good

Aerobic and anaerobic conditions

Pseudomonas aeruginosa ATCC® 9027

Good

Only in aerobic conditions

Clostridium sporogenes ATCC® 19404

Good

Only in anaerobic conditions

References

- ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington. DC. USA.
- EUROPEAN PHARMACOPOEIA 7.0 (2011) 7th ed. § 2.6.1. Sterility. Harmonised Method. EDQM. Council of Europe. Strasbourg.
- HORWITZ, W. (2000) Official Methods of Analysis. 17th ed. AOAC International. Gaithersburg. MD. USA.
- ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- USP 33 - NF 28 (2011) <71> Sterility Tests. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).