

THIOGLYCOLLATE MEDIUM

Ready to use tubes

INTENDED USE

Ready to use medium for sterility testing and for the cultivation of aerobic, anaerobic and microaerophilic organism.

TYPICAL FORMULA (g/l)

Tryptone	15.000
Glucose	5.500
Yeast Extract	5.000
Sodium Chloride	2.500
L-Cystine	0.500
Sodium Thioglycollate	0.500
Agar	0.750
Resazurin	0.001

Final pH 7.1 ± 0.2

DESCRIPTION

Thioglycollate Medium is prepared according to the formulation recommended by USP and EP for the performance of sterility tests. It is used for the cultivation of aerobic, anaerobic and microaerophilic organisms. The 0.075% agar present supports good growth of anaerobes by delaying the diffusion of oxygen in the medium and permitting only a gradual release of reducing substances produced by the microorganisms, and carbon dioxide from the medium. The sodium thioglycollate at a concentration at which it has reduced toxicity for microorganisms, acts as a reducing agent, and eliminates oxygen molecules from the medium. The medium provides a low redox potential, preventing the formation of peroxides, being lethal for aerobic and anaerobic microorganisms. Moreover, the sodium thioglycollate neutralises the bacteriostatic effects of the mercurial compounds in the preparations to be tested for sterility. 15ml of Thioglycollate Medium neutralises 3ml of a solution containing the commonly used mercurial salts at a dilution of 1:10.000. The resazurin acts as an oxidation-reduction indicator, replacing the more toxic methylene blue present in the original Brewer formula. Test tubes or bottles of Thioglycollate Medium can be stored at 20-30°C preferably in the dark, at least until oxidation of the resazurin (colour change to pink of the upper portion of the liquid) does not exceed 30% of the height of the medium. If this limit is exceeded, the test tubes of Thioglycollate Medium can be heated in a water bath until the pink colour of the medium has disappeared, indicating the elimination of all the absorbed atmospheric oxygen. This operation should not be performed more than once, because heating increases the toxicity of the medium.

To perform the sterility test with Thioglycollate Medium, USP or EP recommendations should be followed.

STORAGE

Store at 2-8° away from direct light - When stored as directed the tubed media remain stable until the expiry date shown on the label. Do not use beyond stated expiry date. Media should not be used if there are any signs of deterioration, discoloration or contamination.

PRECAUTIONS

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilize all biohazard waste before disposal.

REFERENCES

- European Pharmacopoeia, 3rd ed. 2001 Supplement
- NCCLS document M22-A2, 1996. Quality Assurance for Commercially prepared Microbiological Culture Media-2nd ed.; Approved Standard.
- U.S. Pharmacopoeia 24, NF 19 (2000)

PACKAGING

552137

Thioglycollate Medium

20 x 10 ml ready to use tubes