70157 Thioglycollate Broth, USP Alternative (Alternative Thioglycollate Medium; Fluid Thioglycollate Medium; NIH Thioglycollate Broth)

Alternative Thioglycollate Medium is recommended for sterility testing with certain biological products, which are turbid or viscous.

Composition:

Ingredients	Grams/Litre
Pancreatic digest of casein	15.0
Yeast Extract	5.0
Dextrose	5.5
Sodium Chloride	2.5
L-Cystine	0.5
Sodium Thioglycollate	0.5
Final pH 7.1 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.
Appearance: Yellow coloured, homogeneous, free flowing powder.
Colour and Clarity: Yellow coloured, clear solution without any precipitate.

Directions:
Suspend 29 g of Alternative Thioglycollate Medium in 1000 ml of distilled water. Heat if necessary to dissolve the medium completely. Distribute into tubes or Erlenmeyer flasks as desired. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

Principle and Interpretation:
Alternative Thiolglycollate Medium is formulated as described in N.I.H. Memorandum, U.S. Pharmacopoeia and Indian Pharmacopoeia. Alternative Thioglycollate Medium contains sodium thioglycollate that can neutralize the bacteriostatic effect of mercurial preservatives. The absence of agar makes it suitable for testing viscous materials. Casein enzymic hydrolysate, yeast extract and L-cystine provide nitrogenous and carbonaceous compounds, vitamin B complex and other essential growth nutrients. Dextrose is the carbohydrate source. Sodium thioglycollate and L-Cystine are reducing agents and lower the redox potential of the medium by removing oxygen.

Cultural characteristics after 24-72 hours at 35°C.

Organisms (ATCC)	Growth
Bacillus subtilis (6633)	+++
Bacteroides vulgarus (8482)	+++
Candida albicans (10231)	+++
Clostridium sporogenes (11437)	+++
Staphylococcus aureus (25923)	+++
Streptococcus pyogenes (19615)	+++
Neisseria meningitidis (13090)	+++
Micrococcus luteus (9341)	+++
Bacteroides fragilis (25285)	+++

References:

1. N.I.H. Memorandum, Culture Media for Sterility Tests, 4th Revision (1955)
2. The United States Pharmacopeia/National Formulary USPXXII/NFXVII, U.S. Pharmacopeial Convention Inc., Rockville, Maryland (1990)
3. Indian Pharmacopeia. Publications and Information Directorate. Third Edition, New Delhi, India (1985)
4. W. Horwitz, Official Methods of Analysis, 17th ed., AOAC International, Gaithersburg, MD (2000)
5. R.M. Atlas, Handbook of Microbiological Media, CRC Press (1993)
6. Downes and Ito (Ed.), Compendium of Methods for Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C. (2001)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.