

PRODUCT INFORMATION

Product Type: Bottles (10-400ml)

Cat No. BP267 - Fluid Thioglycollate Medium (FTM)

Intended Use:

Sterility testing of pharmaceutical products, biologics and devices and growth of aerobic, anaerobic and microaerophilic microorganisms

Principles and uses:

fluid thioglycolate medium (FTM) is used for sterility testing in a laboratory setting according to USP/EP. FTM is prepared according to the formula specified by FDA and according to USP/EP.

FTM supports growth for a variety of fastidious microorganisms. Nitrogen, Carbon and Vitamin sources are provided by Enzymatic digest of Casein and Yeast extract. Sodium Thioglycollate and L-Cystein lower oxidation-reduction potential of the medium by removing oxygen. Sulfhydryl groups (-SH) neutralize antibacterial effect of mercurial preservatives, as a result-FTM is useful for testing material containing heavy metals. The indicator for oxidation is achieved by Resazurin. Resazurin turns pink when oxidized.

Dextrose, yeast extract, L-cystine provide the growth factors necessary for bacterial multiplication. L-cystine and sodium thioglycollate allows *Clostridium* to grow in this medium even under aerobic conditions. Sodium thioglycollate act as a reducing agent and neutralizes the toxic effects of mercurial preservatives and peroxides formed in the medium, thereby promoting anaerobiosis. Any increase in the oxygen content is indicated by a colour change of redox indicator, resazurin to red.

Composition:

Fluid Thioglycollate Medium- 29.8 g/l: Pancreatic Digest of Casein- 15 g/l

Yeast Extract- 5 g/l
Dextrose- 5.5 g/l
Sodium Chloride- 2.5 g/l
L-Cystine- 0.5 g/l

Sodium Thioglycollate- 0.5 g/l

Agar- 0.75 g/l Resazurin- 1.0 mg/l

Storage: 15-25 °C **pH at RT:** 6.9-7.3

Appearance: light amber, slightly opalescent

Shelf life: 3 months

Implementation Date: 04/08/25

Version Number: 01

Exp. Date: Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions:

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Bottles if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Bottles may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

Waste Disposal

After interpretation all items should be destroyed by standard incineration methods.

Performance Testing Results:

GPT: 10-100 cfu

Test	ATCC NO	Incubation Temp. (°C)	Incubation Cond.	Reaction 1
Staphylococcus aureus	6538	30-35 °C	3 days	Growth
Kocuria rhizophila (M. luteus)	9341	30-35 °C	3 days	Growth
Clostridium sporogenes	11437	30-35 °C	3 days	Growth
Pseudomonas paraeruginosa	9027	30-35 °C	3 days	Growth
Candida albicans	10231	30-35 °C	up to 5 days	Growth