TMTH 019- FLUID THIOGLYCOLATE MEDIUM (USP/EP/BP/JP/IP)

INTENDED USE

For sterility testing of biologicals and cultivation of aerobes and microphiles inaccordance with harmonized method.

PRODUCT SUMMARY AND EXPLANATION

Brewer formulated Fluid Thioglycollate Medium for rapid cultivation of aerobes as well as anaerobes including microaerophiles by adding a reducing agent and small amount of agar. The USP, BP, EP and AOAC have recommended the media for sterility testing of antibiotics, biologicals and foods and for determining the phenol coefficient and sporicidal effect of disinfectants. However, it is intended for the examination of clear liquid or water-soluble materials.

COMPOSITION

Ingredients	Gms / Ltr
Pancreatic digest of casein	15.000
Dextrose	5.500
Yeast extract	5.000
Sodium chloride	2.500
Agar	0.750
L-Cystine	0.500
Sodium thioglycollate	0.500
Resazurin sodium	0.001

PRINCIPLE

Dextrose, Pancreatic digest of casein, yeast extract and 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. Also the small amount of agar used in the medium favors the growth of aerobes as well as anaerobes in the medium, even if sodium thioglycollate is deleted from the medium. Sodium thioglycollate act as a reducing agent and neutralizes the toxic effects of mercurial preservatives and peroxides formed in the medium, thereby promoting anaerobiosis, and making the medium suitable to test materials containing heavy metals. Any increase in the oxygen content is indicated by a colour change of redox indicator, resazurin to red. The small amount of agar helps in maintaining low redox potential for stabilizing the medium.

INSTRUCTION FOR USE

Inoculate the sample and Incubate at specified temperature and time.

QUALITY CONTROL SPECIFICATION

Appearance of prepared medium	:	Light straw coloured solution with 10% or less medium pink on standing
Quantity of Medium	:	9 ml and 10 ml of medium in tubes.
pH (at 25°C)	:	7.1 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Staphylococcus aureus	6538	50-100	Luxuriant	30-35°C	= <3 days
Escherichia coli	8739	50-100	Luxuriant	30-35°C	= <3 days
Bacillus subtilis	6633	50-100	Luxuriant	30-35°C	= <3 days
Pseudomonas aeruginosa	27853	50-100	Luxuriant	30-35°C	= <3 days
**Clostridium sporogenes*	19404	50-100	Luxuriant incubated anaerobically	30-35°C	= <3 days
**Clostridium perfringens*	13124	50-100	Luxuriant incubated anaerobically	30-35°C	= <3 days

PACKAGING:

Pack of 25 Ready-To-Use Liquid Medium tubes containing 9 ml and 10 ml in each tube.
Pack of 50 Ready-To-Use Liquid Medium tubes containing 9 ml and 10 ml in each tube.

STORAGE

On receipt, store tubes in the dark at 10-25 °C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed media stored as labeled until just prior to use may be inoculated up to the expiration date and incubated for the recommended incubation times. Allow the medium to warm to room temperature before inoculation.

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.

REFERENCES

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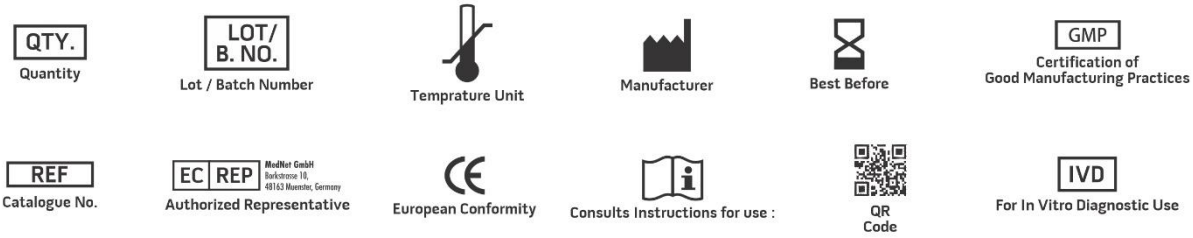

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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