TMK 319S – FLUID THIOGLYCOLLATE MEDIUM w/ 0.05% SPS

INTENDED USE

For cultivation of aerobes, anaerobes and microaerophiles.

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. Fluid Thioglycollate Medium is also routinely used to check the sterility of stored blood in blood banks.

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
Sodium polyanethol sulphonate	0.500

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. Sodium polyanethol sulphonate (SPS) is used as a nontoxic anticoagulant which enables bacterial growth and prevents the action of natural bacterial inhibitors of blood.

INSTRUCTION FOR USE

1. Remove the plastic cap and disinfect the part of the rubber stopper which is now exposed.
2. Draw patient's blood with the sterile needle and syringe and transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood.
3. Venting may be required for aerobic culture and not in case of anaerobic cultures.
4. Incubate at 35-37°C for 18-48 hours and further for 7 days to confirm negative results.

Note: FLUID THIOGLYCOLLATE MEDIUM w/ 0.05% SPS is a ready to use liquid media in glass bottle. The medium is pre-sterilized, hence sterilization is not required.

QUALITY CONTROL SPECIFICATIONS

Appearance of the medium	:	Light straw coloured solution with 10% or less medium pink on standing
Quantity of Medium	:	25ml / 50ml of the medium in glass bottle
pH (at 25°C)	:	7.1 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation (*Incubate anaerobically).

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	35-37°C	18-48 hours
Streptococcus pyogenes	19615	50-100	Luxuriant	35-37°C	18-48 hours
**Clostridium sporogenes*	19404	50-100	Luxuriant	35-37°C	18-48 hours
Clostridium sporogenes	11437	50-100	Luxuriant	35-37°C	18-48 hours
Staphylococcus aureus	6538	10-100	Luxuriant	35-37°C	18-48 hours
Micrococcus luteus	10240	50-100	Luxuriant	35-37°C	18-48 hours
Candida albicans	10231	50-100	Luxuriant	20-25°C	5 Days
Aspergillus brasiliensis	16404	Point Inoculation	Luxuriant	20-25°C	5 Days
Neisseria meningitis	13090	50-100	Luxuriant	35-37°C	18-48 hours

PACKAGING

Aluminium capped bottles containing 25ml (Paediatric) or 50 ml (Adult) media.

STORAGE

On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from unopened packages can be used up to the expiration date. Opened bottles must be used immediately.

Product Deterioration: Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

DISPOSAL

After use, prepared media, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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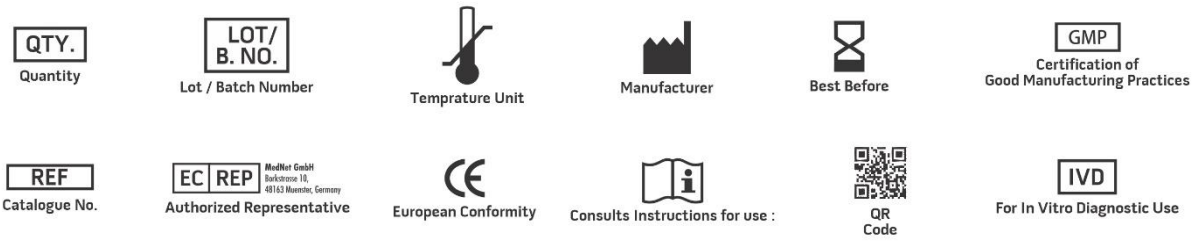

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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