CM 20718 – FLUID THIOGLYCOLLATE MEDIUM W/ MEAT EXTRACT

INTENDED USE

For sterility testing and for cultivation of aerobic, anaerobic and microaerophilic organisms.

PRODUCT SUMMARY AND EXPLANATION

Brewerformulated Fluid Thiolglycollate Medium for rapid cultivation of aerobes as well as anaerobes by adding a reducing agent and small amount of agar. The AOAC have recommended the media for sterility testing of antibiotics, biologicals and foods and for determining the phenol coefficient and sporicidal effect of disinfectants. Fluid Thioglycollate Medium w/ Beefextract is recommended for the detection of viable bacteria in live vaccines, as recommended by the Animal and PlantHealth Inspection Services, USDA.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	5.000
Beef extract	5.000
Dextrose (Glucose)	5.500
Sodium chloride	2.500
L-Cystine	0.500
Sodium thioglycollate	0.500
Resazurin sodium	0.001
Agar	0.750

PRINCIPLE

Themedium consists of Dextrose, Tryptone, yeast extract, Beef extract, L-cystine which provide the growth factors necessary for bacterial multiplication. 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. 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.

INSTRUCTION FOR USE

Dissolve 34.75 gramsin 1000 ml distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Cool to 25°C and store in a cool dark place preferably below 25°C.
Note: If more than the upper one-third of the medium has acquired a pink-purple colour, the medium may be restored once by heating in a water bath or in free flowing steam until the pink colour disappears.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light straw coloured, clear to slightly opalescent solution with upper 10% or less medium pink on standing.
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenii	19404	50-100	Luxuriant	25-30°C	40-72 Hours
Candida albicans	10231	10-100	Luxuriant	25-30°C	40-72 Hours
Clostridium sporogenes	11437	50-100	Luxuriant	25-30°C	40-72 Hours
Micrococcus luteus	10240	50-100	Luxuriant	25-30°C	40-72 Hours
Bacteroides vulgatus	8482	50-100	Fair-good	25-30°C	40-72 Hours
Neisseria meningitidis	13090	50-100	Luxuriant	25-30°C	40-72 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	25-30°C	40-72 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

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

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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6. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of,Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
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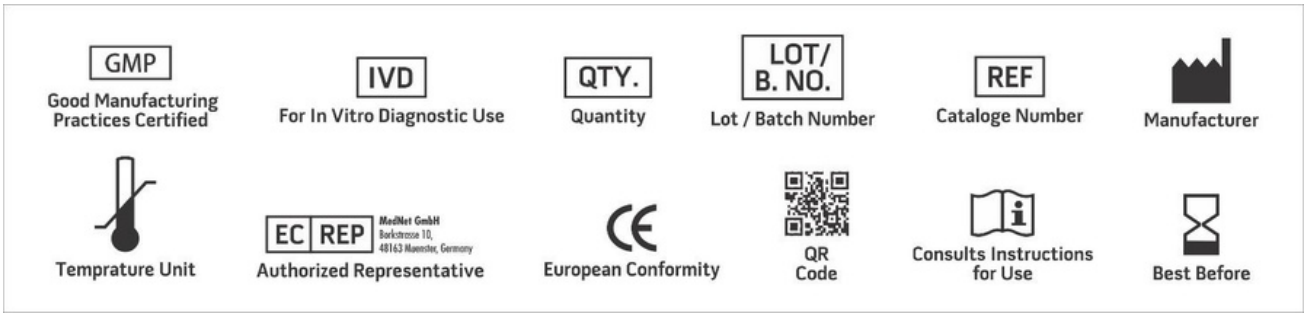

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only