

CM 20711 – FLUID TETRATHIONATE MEDIUM W/O IODINE AND BG (TETRATHIONATE BROTH BASE W/O IODINE & BG) (VEG.)

INTENDED USE

For isolation of salmonellae from food, urine, faeces and other material of sanitary importance.

PRODUCT SUMMARY AND EXPLANATION

Fluid Tetrathionate Medium (Veg) is prepared by completely replacing animal based peptones by vegetable peptones which makes the medium free of BSE/TSE risks. Veg substitutes, Veg hydrolysate and Veg peptone are used in this medium. Tetrathionate Broth Base (Veg) is the modification of Tetrathionate Broth Base which was originally described by Mueller. He found that the medium selectively inhibited coliforms and permitted unrestricted growth of enteric pathogens.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate	2.500
Veg peptone	2.500
Synthetic detergent	1.000
Calcium carbonate	10.000
Sodium thiosulphate	30.000

PRINCIPLE

The medium consists of Tryptone and Veg peptone are the sources of carbon, nitrogen, vitamins and minerals. Synthetic detergent and Brilliant green inhibit accompanying gram-positive microorganisms. The selectivity depends on the ability of thiosulphate and tetrathionate in combination to suppress commensal coliform organism. Calcium carbonate neutralizes the acidic tetrathionate decomposition products. Organisms producing the enzyme tetrathionate reductase e.g. Salmonella species proliferates in the medium. Tetrathionate is produced from thiosulphate after addition of iodine solution.

INSTRUCTION FOR USE

Dissolve 46.0 grams in 1000 ml distilled water and heat just to boiling. DO NOT AUTOCLAVE.

Cool below 45°C and add 20 ml iodine solution (iodine - 6 grams and potassium iodide - 5 grams in 20 ml distilled water) and 10 ml of 0.1% brilliant green solution.

Mix well and dispense in 10 ml quantities. This complete medium should be used on the day of preparation otherwise sterilized broth base may be stored at 2-8°C for some time. Do not heat after the addition of iodine solution. Use the medium immediately after addition of iodine.

Note: Due to presence of calcium carbonate, the prepared medium forms opalescent solution with a white precipitate.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder	: Cream coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Appearance of prepared medium	: Complete medium with added Brilliant Green solution and Iodine solution is light green, opalescent with heavy white precipitate. On standing this precipitates settles down.
pH (at 25°C)	: 5.6 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation when sub cultured on MacConkey Agar after enrichment in Tetrathionate Veg Medium.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Incubation Temperature	Incubation Period
Salmonella serotype Choleraesuis	12011	50-100	Good-luxuriant	Colourless	35-37°C	18-24 Hours
Salmonella serotype Typhimurium	14028	50-100	Good-luxuriant	Colourless	35-37°C	18-24 Hours
Salmonella serotype Typhi	6539	50-100	Good-luxuriant	Colourless	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Fair-good	Pink - red	35-37°C	18-24 Hours
Salmonella serotype Enteritidis	13076	50-100	Good-luxuriant	Colourless	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 500 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.




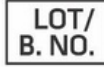








DISPOSAL

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



REFERENCES

1. Mueller, 1923, Compt. Rend. Sco. Biol. (Paris) 89:434.
2. Pollack M.R et.al 1942, J. Pathol. Bacteriol. 54: 469.
3. MacFaddin, J.F. 1985, Media for the Isolation- Cultivation- Identification Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Birkstrasse 10, 48143 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

