

TMV 178 - M-FC AGAR BASE (VEG.)

INTENDED USE

For detection and enumeration of faecal coliforms by membrane filter technique at higher temp. (44.5°C).

PRODUCT SUMMARY AND EXPLANATION

M-FC Veg Agar Base is prepared by using vegetable peptones in place of animal based peptones which makes the media free of BSE/TSE risks. These media are the modifications of M-FC Veg Agar Base which were designed by Geldreich, Clark, Huff and Bert and recommended by APHA for the detection and enumeration of faecal coliforms using membrane filter technique. Faecal coliforms are differentiated from coliforms from environmental sources by their ability to grow at 44.5 + 0.5°C. Faecal coliforms give blue coloured colonies.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate No. 1	10.00
Veg peptone No. 3	5.00
Yeast extract	3.00
Lactose	12.50
Synthetic detergent No. I	1.50
Sodium chloride	5.00
Aniline blue	0.10
Agar	15.00

PRINCIPLE

Veg peptone No. 3, Veg hydrolysate No. 1 and yeast extract provide necessary nutrients for the growth of faecal coliforms. Lactose is the carbon source as well as fermentable carbohydrate in the medium. Synthetic detergent No. I inhibits the growth of contaminating gram- positive microorganisms. Aniline blue and Rosolic acid are the differential indicators.

INSTRUCTION FOR USE

- Dissolve 52.1 grams in 1000 ml purified / distilled water containing 10 ml 1% Rosolic Acid.
- Heat to boiling to dissolve the medium completely.DO NOT AUTOCLAVE.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder
Appearance of prepared medium	: With addition of rosolic acid, red coloured slightly opalescent gel forms in petri plates, clear solution in tubes
pH (at 25°C)	: 7.4±0.2

INTERPRETATION

Cultural characteristics observed with added 1% Rosolic Acid after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth at 35-37°C	Growth at 45.5°C	Recovery at 35-37°C	Recovery at 45.5°C	Color of the colony (on membrane filter)	Incubation Temperature	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	>=10 ⁴	inhibited	inhibited	0%	0%	-	35-37°C	45.5°C	22-24 Hours
<i>Escherichia coli</i>	25922	50-100	luxuriant	luxuriant	>=70%	>=70%	light blue	35-37°C	45.5°C	22-24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	luxuriant	inhibited	>=70%	0%	pinkish	35-37°C	45.5°C	22-24 Hours
<i>Shigella flexneri</i>	12022	50-100	luxuriant	inhibited	>=70%	0%	pinkish	35-37°C	45.5°C	22-24 Hours

PACKAGING:

In pack size of 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

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- Bordner R. H., Winter J. A. and Scarpino P. V. (Eds.), 1978, EPA-600/8-78-017, Environmental Monitoring and Support Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio.
- Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.) Mackie and McCartney, Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone.
- Eaton A. D., Clesceri L. S. and Greenberg A. W., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C.
- Geldreich E. E., Clark H. F., Huff E. E. and Bert M., 1965, J. Am. Water Works Assoc., 57:208.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- Official Methods of Analysis of AOAC International, 2000, 17th Ed., AOAC International, Gaithersburg, Md.
- U.S. Environmental Protection Agency, 1992, EPA-814B-92-2002, Office of Ground Water and Technical Support Division, USEPA, Cincinnati, Ohio.



 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 Buckstrasse 10, 49163 Moenster, 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 Lab Use Only**
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