

Product Data Sheet

M-FC AGAR BASE (VEG.)

Product No. GB-DCM-00354-1A

INTENDED USE

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

PRODUCT SUMMARY

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.

Product Specifications

| 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.



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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

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | 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 |
|------------------------|-------|-------------------|-----------|------------------|---------------------|--------------------|--|------------------------|------------------------|-------------------|
| Enterococcus faecalis | 29212 | 50-100 | inhibited | inhibited | 0% | 0% | - | 35-37°C | 45.5°C | 22-24 Hours |
| Escherichia coli | 25922 | 50-100 | luxuriant | luxuriant | >=70% | >=70% | light blue | 35-37°C | 45.5°C | 22-24 Hours |
| Salmonella Typhimurium | 14028 | 50-100 | luxuriant | inhibited | >=70% | 0% | pinkish | 35-37°C | 45.5°C | 22-24 Hours |
| Shigella flexneri | 12022 | 50-100 | luxuriant | inhibited | >=70% | 0% | pinkish | 35-37°C | 45.5°C | 22-24 Hours |



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.

This product is for research use only.