ENVIRONMENTAL EXPRESS®
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Prepared Plates for Microbiology FAQs

What is the color of the media?

- mFC plates are a reddish or purplish color and may vary slightly from lot to lot.
- m-TEC plates are tan in color.
- mEI plates are a dark amber color.

Why do the mFC plates vary on color from one lot to the next?

The mFC plates contain Rosolic Acid which helps to suppress the growth of non-fecal coliform bacteria. This Rosolic Acid is made as a suspension and then added to the media which can cause a slight variation in the overall color of the media from one lot to the next. The color variations do not affect the performance of the media at all.

What should the color of the target colonies be after incubation?

- Fecal coliform colonies using the mFC plates will be medium to dark blue in color.
- E. coli colonies using the m-TEC plates will be magenta, or red, in color.
- Enterococcus colonies using the mEI plates will all have a blue halo surrounding the colony.

How much sample volume should I filter?

All results are based on a filtration volume of 100mL of sample. One may need to make dilutions of samples due to high concentrations of bacteria but all results should be calculated back to a 100mL volume of sample.

What is the correct way to place the membrane filter onto the media in the plate?

When placing the filter on the media plate, roll the filter onto the media to prevent air bubbles. Air bubbles will cause low recoveries.

What temperature should I incubate the plates?

- mFC plates should be incubated at 44.5 ± 0.2°C for 24 ± 2 hours.
- m-TEC plates should be incubated at 35 ± 0.5°C for 2 hours then at 44.5 ± 0.2°C for 22 hours.
- mEI plates should be incubated at 41°C for 24 hours.

How are the plates tested before they ship out?

A positive control, a negative control, and a blank are all analyzed on the plate to ensure the proper organism growth and prove sterility. A final pH check of the media after autoclaving is also performed.

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I am getting unexpectedly low recoveries—what should I do?

- Check the pH of the media and any buffer water you are using. A pH that is out of the method specified range can cause poor growth.
- Ensure that the temperature of the incubator is correct.
- Ensure that the filter funnel is cooled to room temperature after autoclaving and before use.
- Check to make sure that your sample collection bottles have enough sodium thiosulfate to dechlorinate the sample.

I am having a hard time telling if the colonies on my m-TEC plates are really E. coli. What should I do?

The magenta color of the colonies should be visible from both the top of the plate and the underside of the plate. Flip the plate over to see if you can see the red pigment. If you can, it is indeed an E. coli colony. If not, it may not be and further confirmation may be needed.

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