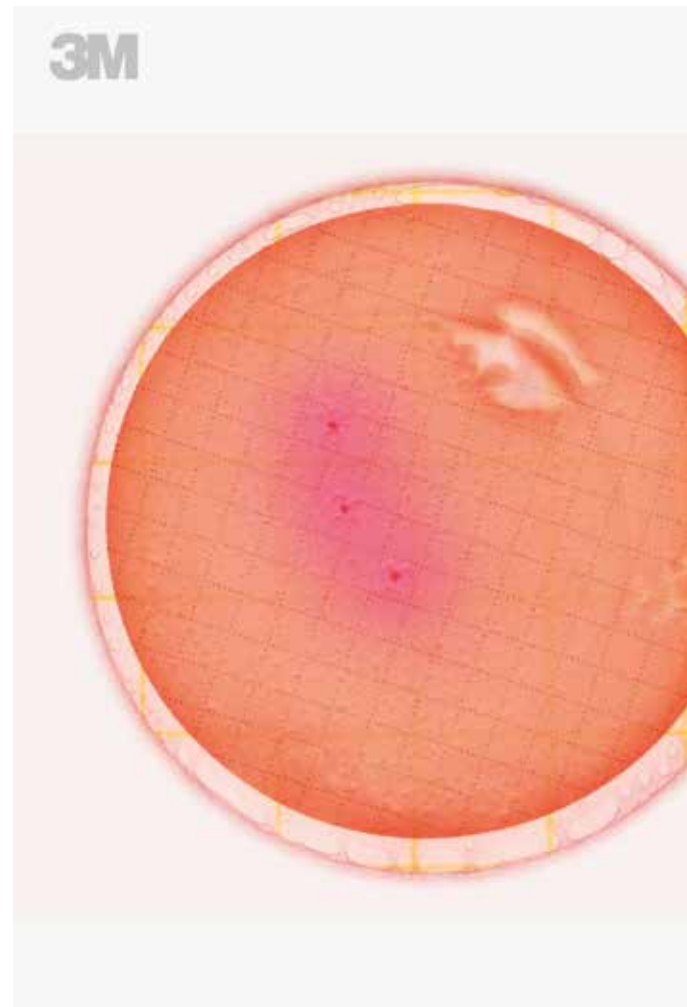




Petrifilm™

Interpretation Guide

The 3M™ Petrifilm™ Aqua Coliform Count Plate is a sample-ready culture medium system which contains Violet Red Bile (VRB) nutrients, a cold-water-soluble gelling agent, and a tetrazolium indicator that facilitates colony enumeration. 3M Petrifilm Aqua Coliform Count Plates are used for the enumeration of coliforms in the bottled water industry. On 3M Petrifilm Aqua Coliform Count Plates, coliform colonies are indicated by red colonies associated with gas.



AQCC
Aqua Coliform Count Plate



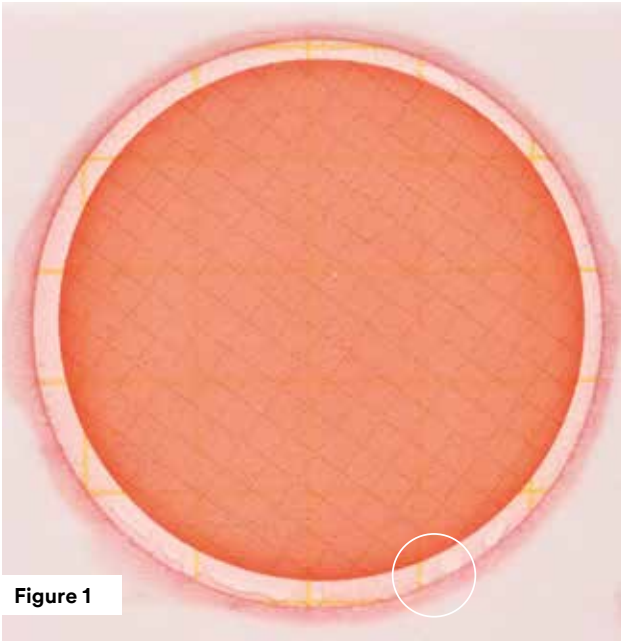


Figure 1

Coliform count: 0

Gas bubbles surrounding filter do not indicate microbial growth. See circle for example.

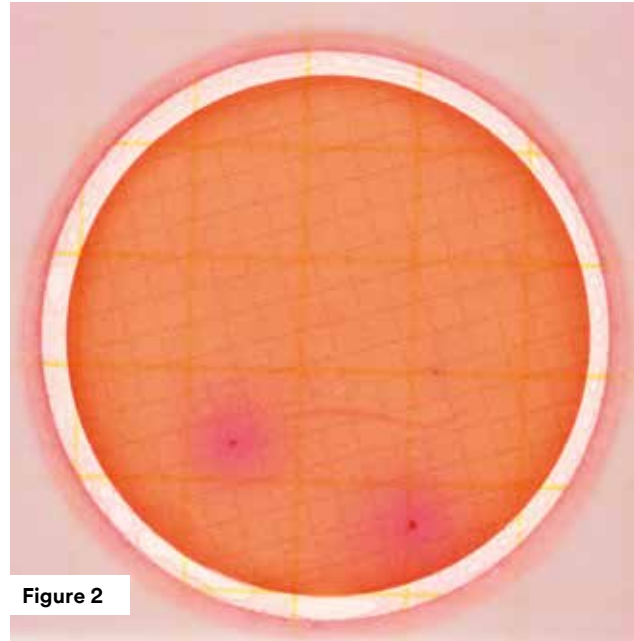


Figure 2

Coliform count: 0

Red colonies without closely associated gas bubbles may be coliforms and should be picked and tested with appropriate confirmation methods.

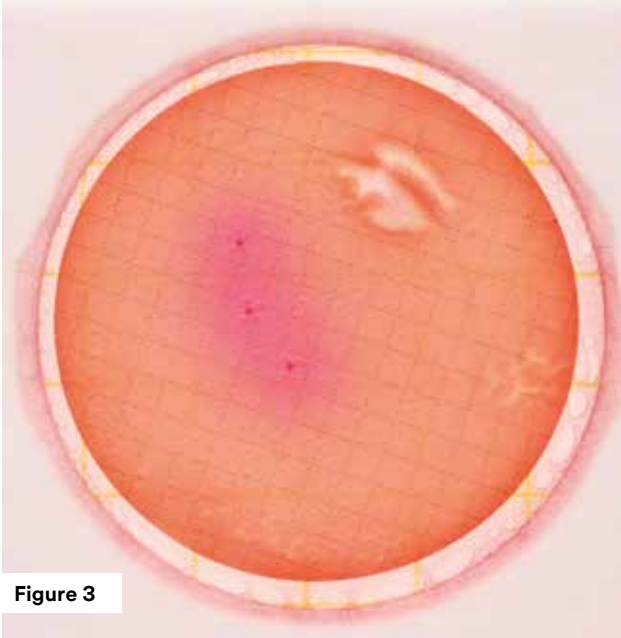


Figure 3

Coliform count: 3

Coliforms produce acid (faint pink halo associated with colonies) and are associated with gas bubbles.

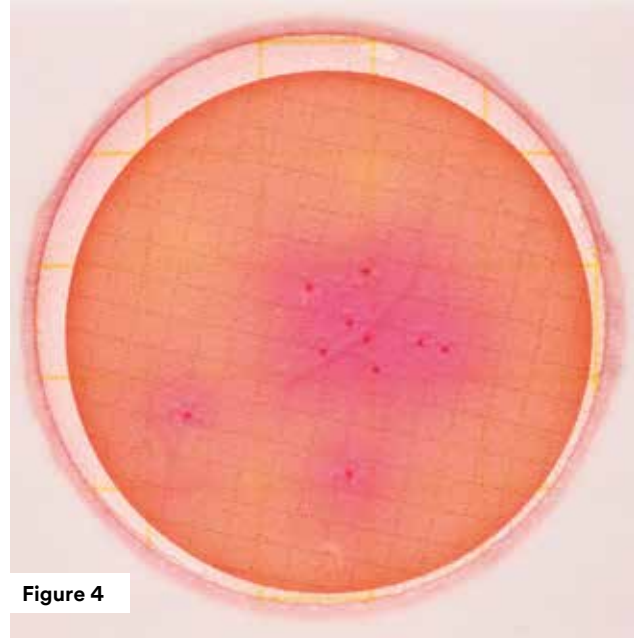


Figure 4

Coliform count: 10

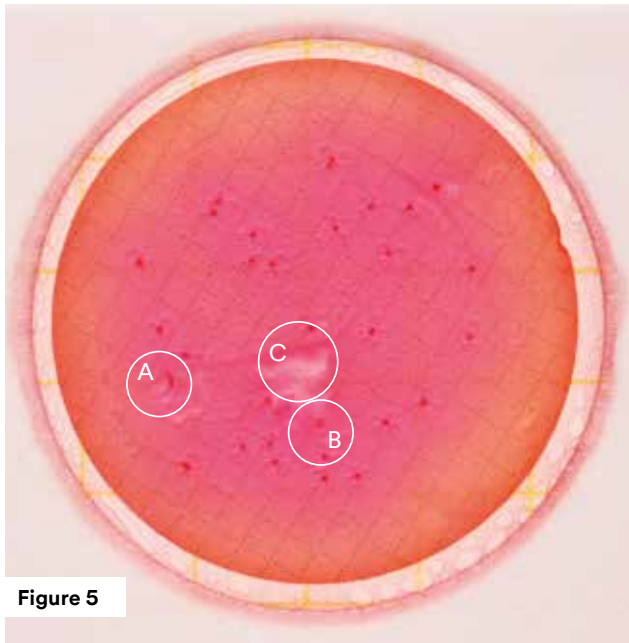


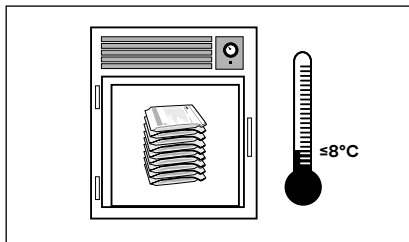
Figure 5

Coliform count: 30

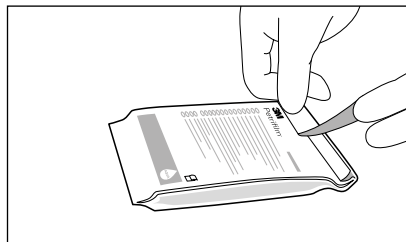
Gas bubbles may influence colony morphologies. The colony in Circle A is distorted by the gas bubble. In Circle B, a faint colony is underneath the gas bubble. Note large artifact gas bubble in the center of the plate (Circle C).

Reminders for Use

Storage

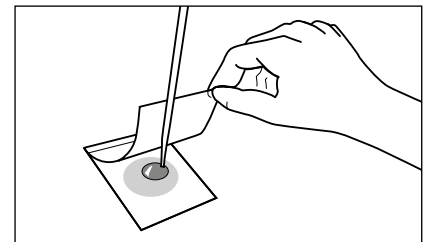


- 1 Store unopened packages at $\leq 8^{\circ}\text{C}$ ($\leq 46^{\circ}\text{F}$). Use before expiration date on package. Just prior to use, allow unopened pouches to come to room temperature before opening.

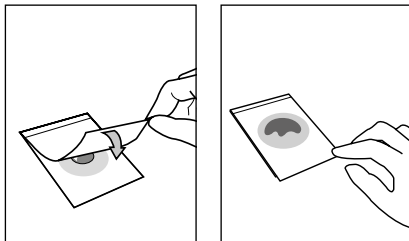


- 2 To seal opened package, fold end over and apply adhesive tape. **Do not refrigerate opened packages.** Use 3M Petrifilm Aqua Coliform Count Plates within one month after opening.

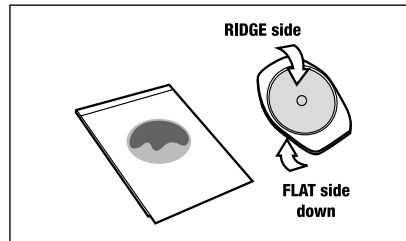
Hydration Procedure



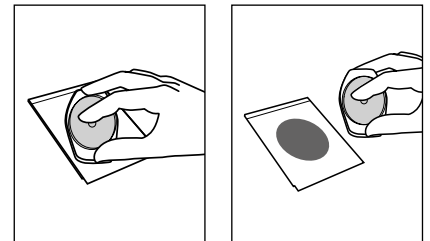
- 3 Place 3M™ Petrifilm™ Aqua Plate on a flat, level surface. With the pipette perpendicular to the 3M Petrifilm Aqua Plate, place hydration diluent onto the center of the bottom film. Hydration diluents include distilled water, deionized (DI) water and reverse osmosis (RO) water.



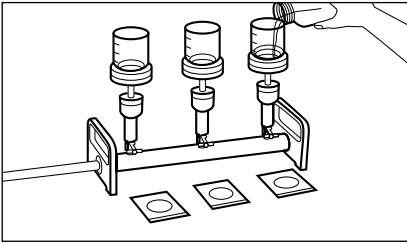
- 4 Carefully roll top film down to avoid entrapping air bubbles. Do not let top film drop.



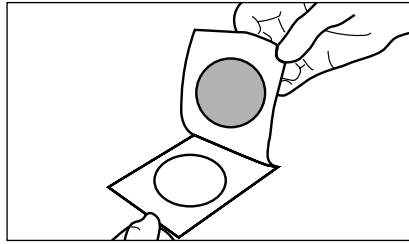
- 5 With flat side down, place 3M™ Petrifilm™ Spreader on top film over hydration diluent.



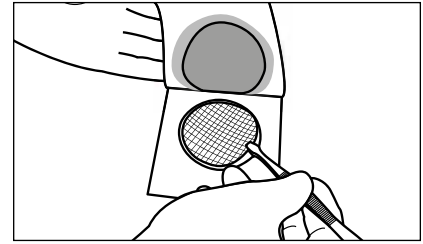
- 6 Gently apply pressure on spreader to distribute inoculum or hydration diluent over circular area before gel is formed. Do not twist or slide spreader. Lift spreader.
 - Allow the hydrated plates to remain closed for a minimum of one hour before use.
 - Any additional hydrated 3M Petrifilm Aqua Coliform Count Plates may be stored in a sealed pouch or plastic bag. Protect plates from light and refrigerate at $2\text{--}8^{\circ}\text{C}$ ($36\text{--}46^{\circ}\text{F}$) for up to 7 days.



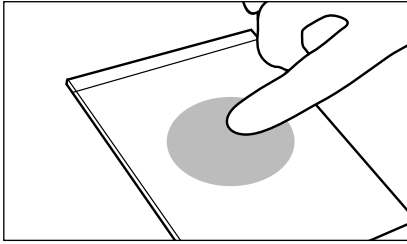
7 Following standard procedures for water analysis, membrane filter water sample using a 47 mm, 0.45 micron pore size Mixed Cellulose Ester (MCE) filter.



8 Carefully lift top film.

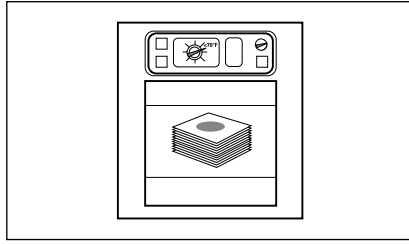


9 Place filter in the center of the well. Roll top film down to minimize air bubbles or gaps between the filter and the 3M Petrifilm Aqua Coliform Count Plate.



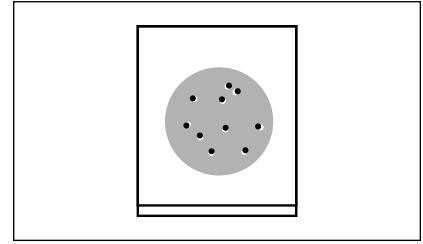
10 Lightly apply pressure to ensure uniform contact of the filter with the gel and to eliminate any air bubbles.

Incubation

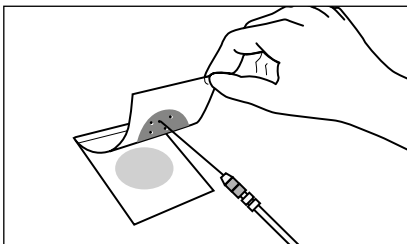


11 Incubate 3M Petrifilm Aqua Coliform Count Plates in a horizontal position, clear side up, in stacks on no more than 20 plates at $35^{\circ}\pm 1^{\circ}\text{C}$ for 24 ± 2 hours or $36^{\circ}\pm 1^{\circ}\text{C}$ for 24 ± 2 hours. **Please refer to the the product instructions for third party validated methods.**

Interpretation



12 3M Petrifilm Aqua Coliform Count Plates can be counted on a standard colony counter or other illuminated magnifier.



13 Colonies may be isolated for further identification. Lift top film and pick the colony from the gel. Red colonies without closely associated gas bubbles may be coliforms and should be picked and tested with appropriate confirmation methods.

3M Food Safety offers a full line of products to accomplish a variety of your microbial testing needs. For more product information, visit us at 3M.com/foodsafety/Petrifilm or call 1-800-328-6553.



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User's Responsibilities: 3M Petrifilm Plate performance has not been evaluated with all combinations of microbial flora, incubation conditions and food matrices. It is the user's responsibility to determine that any test methods and results meet the user's requirements. Should re-printing of this Interpretation Guide be necessary, user's print settings may impact picture and color quality.

For detailed CAUTIONS, DISCLAIMER OF WARRANTIES/LIMITED REMEDY and LIMITATION OF 3M LIABILITY, STORAGE AND DISPOSAL information and INSTRUCTIONS FOR USE, see Product's package insert.

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