

# Instructions for the mWater *E. coli* test kit

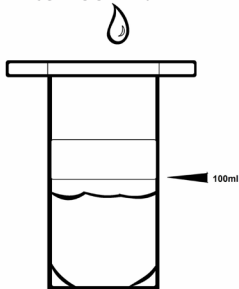
Use the mWater Surveyor App to record and map test results! Visit [surveyor.mWater.co](http://surveyor.mWater.co) or search for mWater in the Android or iOS app stores.

## Important precautions:

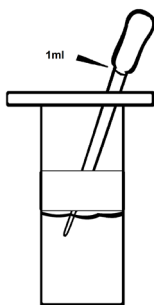
- The result of a test only reflects the quality of water of the sample that was tested on the day it was sampled. Water quality changes frequently and water quality monitoring should include regular testing and management of sanitary risks.
- Store the kit in the dark in a climate controlled room and always check the expiration date on the kit before use.
- This kit tests for *E. coli*, a type of bacteria cause by fecal contamination that is associated with an increased risk of diarrheal disease. There are hundreds of other possible water contaminants that could pose a health risk. Consult with local water authorities or laboratories to determine what additional risks might be present in your water supply.
- Use *aseptic technique*. This means: (i) Assume that your hands and any other surfaces may be contaminated with the target bacteria being detected. Use hand sanitizer before opening one of the sterile parts of the kit (pipettes, compact dry plates, WhirlPak bags, and HiEcoli test buds); (ii) Never touch parts that will come into direct contact with the water sample; and (iii) Minimize the time that the water sample or other sterile parts are exposed to the air.
- Dispose of used tests safely. After reading results, place 1 Aquatab into the WhirlPak bag to disinfect. After 30 minutes, pour the contents into a toilet or drain. Ideally, test materials should be disposed of as medical waste at local hospitals or labs. Where this is not possible, dispose by incineration or in trash receptacles away from water sources that are not accessible to children, trash pickers, or animals.

## Test procedure:

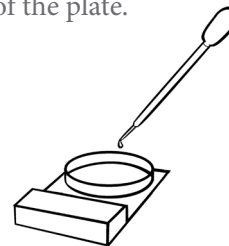
**1** Remove tear off strip from top of WhirlPak ThioBag without touching inside and fill to 100 ml.



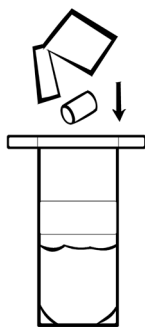
**2** Open a fresh pipette and remove 1 ml of sample from WhirlPak ThioBag.



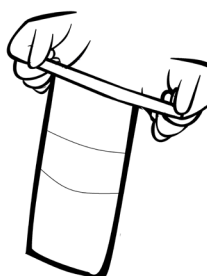
**3** Lay a fresh Compact Dry Plate on a flat surface, carefully remove the lid without touching the inside, and squeeze the 1 ml sample onto the center of the plate.



**4** Tear open a HiEcoli packet and drop the test bud into the WhirlPak bag (do not touch bud or inside bag).



**5** Seal the WhirlPak bag by holding the white tabs at the edges and flipping the bag over 3 times. Fold over the tabs or twist them together.



**6** Store the Compact Dry Plates and WhirlPak bags for 24 hours in a warm and dark location where the temperature is between 27 and 40 Celsius at all times.



## Interpreting results:

- If WhirlPak bag remains yellow, sample is negative for *E. coli* at the World Health Organization (WHO) limit for safe drinking water.
- If WhirlPak bag has any green or blue color, test is positive for *E. coli*.
- If Compact Dry Plate has any blue spots (colonies), test is positive for *E. coli* above the WHO limit for safe bathing/recreational water.

