AquaVial Coliform Water Test Kit

FAQ

Q: How many tests can be done with one kit?
A: Each kit (jar) contains 4 vials that can be used to perform 4 tests.
Each Box contains 25 kits of 4 vials that can be used to perform 100 tests.

Q: What happens if I add less or too much water?
A: The test is designed as a limit test, and as a result is less sensitive to the exact amount of water being used in the test. If at least one coliform bacterium is present, the test will change color within 48 hours.

Q: What does it mean if the vial remains yellow for the first 48 hours, but changes color a couple of days later?
A: The reagent in the test vial detects the presence of an enzyme produced by coliform bacteria. However, the enzyme can sometimes be present at very low concentrations from other sources or from dead bacteria. In some cases, this can result in colour change after the recommended 48 hour period (after 4-5 days or even longer). However, if the vial did not change color within the first 48 hours it is a clear indicator that there is no viable (live) fecal coliform bacteria in your water.

Q: What is the expiration/use by date on the kit?
A: The kit is valid for 2 years from the manufacturing date. Expiration date is indicated on each box.

Q: I lost the instruction sheet after I completed the first test. Where can I find the information to complete the other tests?
A: You can download a PDF copy of the instructions from the "Technical Specifications" tab. Video instructions are also available on the "How to video" tab.

Q: My vials turned purple, how many CFU does it have?
A: If the liquid changed colour from yellow to orange or purple, the water has over 1 CFU/ml, which is above the limit recommended by the World Health Organization. This means that the water is UNSAFE to use or drink. This is a screening test and is only designed to indicate whether the water is SAFE to use; therefore a bacterial count greater than 1 CFU/ml is irrelevant for water consumption safety testing. If you require the exact bacterial count, this test is not suitable for your needs. Please contact a specialized lab that can provide the exact bacterial count.

Q: Will the test work on brine/salt water?
A: Yes, the test is designed to work on salt concentrations up to about 7% w/w, which is twice the average salt concentration in salt water.

Q: Will this test kit work in coastal salt water?
A: Yes it would, as long as the water is not brown or very turbid. The test is based on a color change so the water has to be clear enough to see the change in color from yellow to purple.

Q: Will this work for public swimming pools?
A: The test can be used for swimming pools to detect coliform bacteria. The test however will not detect ALL dangerous bacteria that could be found in pools - for example bacteria that causes swimmer's ear or skin rashes are not detected by this kit.

Q: What is the yellow substance in the E.coli vial?
A: The yellow substance is a dye that turns red in presence of Beta Galactosidase, an enzyme produced by majority of coliform bacteria.

Q: How long does it take to get results?
A: 24 hours if incubated at 35-40C (95-105F) or up to 48 hours, if incubated at room temperature 20-25C (68-77F).

Q: Will this work to determine if pond water is safe for swimming?
A: Yes. According to EPA (Environmental Protection agency) and WHO (World Health Organization), recreational water should have less than 200 CFU per 100 ml of water for fresh water beaches, and less than 100 CFU/100 ml (or 1 CFU/ml) in swimming (public pools) waters. Aquavial E. coli has a detection limit of 1 CFU/ml for E. coli and fecal coliform, which is the main criteria for safe swimming water.

Q: Why Should I Test for Coliform Presence in Water?
A: E. coli and coliform bacteria presence in water indicates potential fecal contamination of the water source. These bacteria can lead to serious illness in humans. Infection symptoms include bloody diarrhea, stomach cramps, vomiting and occasionally, fever.
Coliform bacteria can also cause pneumonia, other respiratory illnesses and urinary tract infections. In case E. coli or other coliform bacteria are detected, the water should not be consumed. Further investigation and testing of the entire system should be initiated to confirm the results.

Q: How is AquaVial Coliform different?
A: AquaVial Coliform test kit takes advantage of the most recent advances in biotechnology research to detect the presence of coliform bacteria. Detection is indicated simply by means of a colour change in the sample. The nutrients used in our formulation are specifically designed to enhance the sensitivity to fecal coliform bacteria. This formulation reduces the risk of false positive results.

The color change is produced by a dye that changes its color from yellow to purple in the presence of an enzyme (Beta-galactosidase). This enzyme is produced by all coliform bacteria.

Compared with other tests on the market, our test has a simpler testing method. Just add 4 ml of water with the pipette provided and wait. The results can be read within 24 hours at 35- 40 degrees Celsius. If the test is kept at lower temperature, confirm there is no color change after 48 hours.