

## Pool & Spa – Bacteria Test

The **Pool & Spa – Bacteria Test** is fast (under twenty minutes from start to finish) and yields reliable, lab-accurate results on the spot. There's no other test like it. With its combined ease of use, speed, and affordability, the **Pool & Spa – Bacteria Test** brings you peace of mind and revolutionary pool-water safety.

### What results are expected?

The **Pool & Spa – Bacteria Test** is an antibody-based rapid test kit which detects bacteria in swimming pools and spas. The **Pool & Spa – Bacteria Test** accurately detects pseudomonas, E.coli, species of Aeromonas, Shigella, Enterobacter, Klebsiella, and many other coliform and non-coliform bacteria.

### Before you begin

1. Each **Pool & Spa – Bacteria Test** contains:
  - One foil packet including
    - Test Strip
    - Sample Vial
    - Sample Dropper Pipette
2. Do not open the foil packet until immediately prior to use.
3. Use the sample vial provided to run the test.
4. Sample pool water at the shallow end of the pool.
5. Do not re-use any test strips, droppers, or vials.
6. Store test at 10-30 °C.

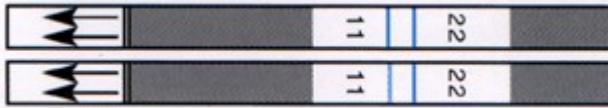
### Instructions for use

1. Open foil pouch and take out all contents.
2. Using a clean dropper, place *exactly* ONE dropper-ful of water into the sample vial. To draw up sample, tightly squeeze the bulb at the end of the dropper and place the open end into water sample. Release the bulb to pick up sample, then squeeze again to expel sample into vial.
3. Gently swirl vial. Let stand seven minutes. Swirl vial again and return vial to flat surface.
4. Place test strip into sample vial with arrows pointing down.
5. Wait 10 minutes. Do not disturb strip or vial during this time. Reddish lines will appear on strips.
6. Take strip out of the vial and read results.

**Negative:** Only one line, next to number 22, is present.



**Positive:** Line 11 and Line 22 are present. Line 11 may be lighter in intensity or equal in intensity to line 22.



**If only line 22 is present, test is NEGATIVE**  
**If line 11 and line 22 are present, test is POSITIVE**

If no lines appear, the test is not valid. Repeat procedure, starting with Step 1, with a new test kit.

**If the test is positive, your water sample may contain bacteria levels that are dangerous to your health.**

## Specifications

### Procedure

- Under 20 minutes, no incubation
- On-site, no transit of sample required
- No chemicals to add or measure
- No power source required

### Readout / Result

- Immediate
- Visual
- No instrumentation ruggedness

**Water Temperature:** 5 – 40 °C

- pH: 4 – 10
- Total Chlorine: 0-50 ppm
- Bromine: 0- 40 ppm
- 18 month shelf life

### Applications

- Swimming Pools
- Spas
- Lakes and rivers
- Other recreational water venues

### Detection Range

Pseudomonas, Aeromonas, E.coli, species of Salmonella, Shigella, Enterobacter, Klebsiella and many other Coliform and non-Coliform bacteria.



*Please note that this is a screening test and can not be used to certify water as safe or unsafe for drinking. It provides approximate results ONLY when used in strict accordance with instructions.*

## Further Information

### Bacteria

When a bacterial contamination occurs, there are always multiple strains present - a toxic strain of Pseudomonas or E. coli is always vastly outnumbered by other bacteria. To maximize the sensitivity for Pseudomonas and other toxic species, the **Pool & Spa – Bacteria Test** detects a wide range of bacteria, including both toxic and non-toxic strains. As with microbiological tests for food and drinking water, the idea is to detect a bacterial contamination, rather than a single toxic strain. Health authorities, on the other hand, sometimes use laboratory culture tests that actually look for specific toxic strains. If the **Pool & Spa – Bacteria Test** is positive, that does not mean that people will necessarily get sick - it means that the pool/spa contains bacteria among which there may be toxic Pseudomonas or E. coli or Shigella or Salmonella, etc.

### Testing for Bacteria

Currently, testing for bacteria in pool and spa water involves collecting the sample, transporting it to a lab, and then waiting for results of an incubation-based assay – a process that can take 24-48 hours. But what happens while you wait? Not only are users exposed to unknown health risks, but the water quality may change. When the test results come back, it is an indication of yesterday's water quality, not today's.

Now there is a test that detects bacteria in pool and spa water in less than 20 minutes, with a simple, on-site procedure that requires no instrumentation or user training. Silver Lake Research Corporation (SLRC) has developed the **Pool & Spa – Bacteria Test**, the world's first truly rapid test kit for bacteria in water. Now, you can test your water on the spot, and the result may prevent you from acquiring recreational water illnesses (RWIs).

This revolutionary test kit is based on proprietary immunochemical reagents and formats developed by SLRC. The **Pool & Spa – Bacteria Test** has all the accuracy and reliability of a lab test, but in a disposable test strip similar to a home pregnancy test. The combination of ease-of-use, speed, and reliability add up to an ideal screening and monitoring method for all types of water samples.

### Why Test for Bacteria?

Is your water safe?

When it comes to safety, everything else is secondary. The same should be true in the pools and spas that we swim in and allow our children to swim in. The **Pool & Spa – Bacteria Test** for pools and spas is easy enough for anyone to use, and is priced within reach of any pool or spa owner and operator. Until now, the only method of testing for bacteria in a pool or spa was not feasible for most owners and operators. With the **Pool & Spa – Bacteria Test** for pools and spas, water quality / safety should never be left to chance.

### Fast, accurate, and easy-to-use

The **Pool & Spa – Bacteria Test** is fast (under twenty minutes from start to finish) and yields reliable, lab-accurate results on the spot. There is no other test like it. With its combined ease of use, speed, and affordability, the **Pool & Spa – Bacteria Test** brings new levels of pool safety to every customer.



### **Water quality changes**

Chemicals evaporate and dissipate, especially as bather load increases or temperature rises. If the water balance or disinfectant levels are outside of the normal range, the pool is especially susceptible. All it takes is the introduction of bacteria at the right time to create a major outbreak that can make everyone sick.

### **Protect swimmers from RWIs and yourself from liability**

Due to drastic rises in swimming-related illnesses over the past several years, the CDC (Centers for Disease Control and Prevention, USA) has created a new term: RWI (Recreational Water Illness). Most RWIs are caused by bacterial contamination of the pool or spa. RWIs are dangerous, painful, and can hit both children and adults.

An illness that is spread by swallowing, breathing, or having contact with contaminated water from swimming pools, spas, hot tubs, decorative water fountains, lakes, rivers, or oceans. Recreational water illnesses (RWIs) can cause a wide variety of symptoms, including skin, ear, respiratory, eye, and wound infections. The most commonly reported RWI is diarrhea. Diarrheal RWIs can be caused by germs (such as Shigella and E. Coli).

Common effects of RWIs include earaches, stomachaches, vomiting, diarrhea, and eye irritation. By testing for potentially dangerous RWI-causing bacteria with the **Pool & Spa – Bacteria Test** you may prevent many RWI outbreaks.

### **Some bacteria are chlorine-resistant**

In a 2002 study by the CDC, over 60% of tested pools and spas had inadequate levels of disinfection. If chlorine levels are inadequate in such a high number of tested pools, and some bacteria are resistant to proper levels of chlorine, who's to say that any pool is safe? Remember that all it takes is one momentary drop in chlorine level and a strain of chlorine-resistant bacteria can infect your pool or spa. Once some bacteria are introduced, it can take up to five days in a properly chlorinated pool to kill them.

### **Know when to change water, save water, lost heating, and lost chemicals**

Until now, pool and spa operators who were concerned about their guests' health had only one option to guarantee the quality of the water in pools and spas: change the water. Without knowing if the water is good or bad, it was simply a shot in the dark. Changing water is a delicate balancing act - unnecessary changes cost money in lost water, heating, and chemicals, and changing too late can result in RWIs among bathers. Regular testing with the **Pool & Spa – Bacteria Test** will help pinpoint when is the best time to change water, eliminating guess work.