

A rapid test intended for the qualitative detection of *Legionella pneumophila* serogroup 1

For testing:

- Cooling Towers.
- Hot and Cold Domestic Water Systems.
- Whirlpool Spas.

Legionella Direct Test Kit

Also known as the: **Legionella Field Test Kit**

Instructions

the world's fastest legionella test

hydrosense®

TO VIEW OR PURCHASE, VISIT:

www.TheWaterTreatmentStore.com

OR

www.LegionellaTestKit.com

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Fld-I-13-01

Limit of detection

Laboratory analysis has demonstrated that 98 to 100 percent (91% CI) of tests are positive for clean water samples containing 100 CFU/ml *Legionella pneumophila* serogroup 1.

Test operating limits

The test has been evaluated for operation between 10–40°C (50–104°F). Samples requiring greater than 10 minutes to filter may give erroneous results. A wide range of non-oxidizing biocides and biodispersants have been checked for cross reaction and interference with the test.

The test should not be used on systems treated with biguanide or tetrakis hydroxymethyl phosphonium sulfate (THPS) based biocides.

Specificity

The test has been shown to be non-reactive with the following bacteria (at 1x10⁸ organisms per sample):

- | | |
|--------------------------------------------------------|----------------------------------|
| • <i>Acinetobacter calcoaceticus</i> | • <i>Pseudomonas aeruginosa</i> |
| • <i>Aeromonas hydrophila</i> subsp. <i>Hydrophila</i> | • <i>Pseudomonas fluorescens</i> |
| • <i>Bacillus subtilis</i> | • <i>Pseudomonas putida</i> |
| • <i>Burkholderia cepacia</i> | • <i>Pseudomonas stutzeri</i> |
| • <i>Citrobacter freundii</i> | • <i>Ralstonia pickettii</i> |
| • <i>Citrobacter koseri</i> | • <i>Raoultella terrigena</i> |
| • <i>Enterobacter cloacae</i> | • <i>Streptococcus pyrogenes</i> |
| • <i>Escherichia coli</i> | • <i>Yersinia ruckeri</i> |
| • <i>Klebsiella oxytoca</i> | |
| • <i>Legionella pneumophila</i> serogroups 2–15 | |

Staphylococcus aureus and *Legionella pneumophila* serogroups 4 and 7 in samples at concentrations higher than 1x10⁸ organisms per sample may produce weak positive results. These concentrations are higher than would be expected to be present in normal water samples.

Storage

The test is intended for storage at room temperature. Do not freeze. When stored correctly, the test will continue to operate within design specification, until the specified expiration date.

Do not use the test after the date specified on the packaging. Do not use any test where the foil packaging is perforated.

Disposal

The test, filter, syringe and caps cannot be reused or recycled. The packaging materials and this instruction leaflet can be recycled.

Disclaimer

Albagaia makes no warranties or representations regarding performance of the products, or that the products are merchantable or fit for a particular purpose. Albagaia expressly disclaims all other warranties and representations, express or implied, or which arise by operation of law or otherwise.

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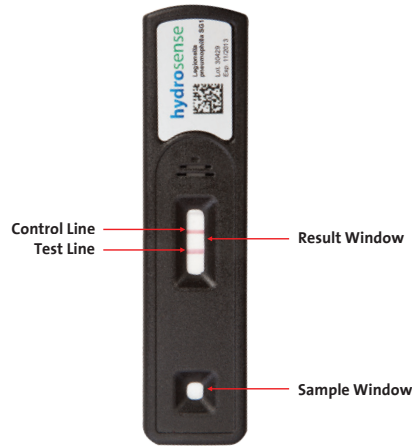
Overview

This test kit is used to detect the presence of *Legionella pneumophila* serogroup 1 bacteria in cooling water systems, domestic hot/cold water and whirlpool spas. The test operates via a Lateral Flow Immunochromatographic Assay (LFICA). Each kit contains all the supplies required to perform ten tests. Each kit contains the following:

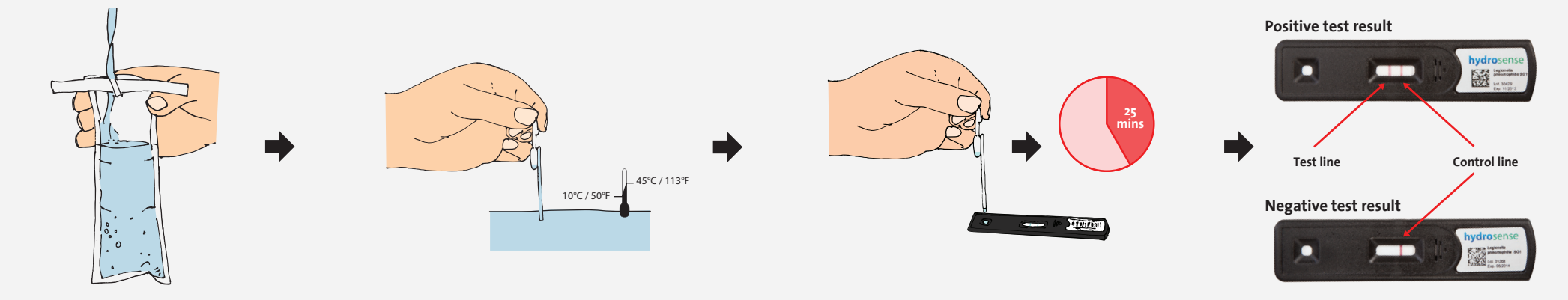
- 10 Individual foil wrapped tests, each with an exact volume pipette.
- 10 Sterile sample bags.
- Instructions for use.

The product is intended for use as part of an overall water treatment, management and risk reduction approach and should NOT be used as the sole method for assessing risks associated with *Legionella* bacteria.

This test is intended for the analysis of water samples only. It is NOT intended for the diagnostic testing, in a clinical or medical situation, of Legionnaires’ Disease in humans.



Test procedure



For optimum results the test should be performed at room temperature. The foil wrapping should NOT be opened until immediately prior to running the test.

Step 1: Take a sample

Identify the water system to be sampled and an appropriate sample point from which to obtain a representative sample. Large systems may need to be sampled and tested at multiple locations.

Open the provided sample bag by tearing the perforation just above the white strip. Open the sample bag by grasping and pulling the tab on each side of the bag.

Before taking a sample, run water through the sample point for at least 15 seconds, if possible. Fill the sample bag from the sample point. (The bag may have condensation inside before use, depending on storage conditions.)

Step 2: Add water to the test strip

Allow the sample to reach a temperature between 10–45°C (50–113°F).

Remove the test strip from its foil wrapping, and place it on a flat surface.

If the foil is opened and the test is NOT performed within 60 minutes discard the test.

Place the open end of the pipette into the water sample in the sample bag and then squeeze and release the top bulb.

This should draw water all the way up the long tube and may place a small amount of sample in the bottom bulb.

Avoid getting air bubbles in the tube. Empty and refill the pipette if necessary to remove any air bubbles.

Place the pipette over the small sample window at one end of the strip and then squeeze the top pipette bulb again. This will dispense the correct amount of water sample onto the test strip. Record the time.

RECORD THE TIME. Allow the test to incubate at room temperature for 25 minutes. Leave the test strip sitting on a flat surface during incubation.

Step 3. Interpreting the results

After 25 minutes, examine the test strip in good lighting. If the test is not read within 45 minutes of adding the sample, it

should be discarded and another test run.

The test should show one of the following results in the large result window on the test strip:

- Two RED lines across the result window. The red line closest to the sample window may be very faint (pale pink). Any distinct line, no matter how faint should be included. This is a **POSITIVE** result.

OR

- One RED line across the result window at the end furthest from the sample window. This is a **NEGATIVE** result.

Positive Results

If a positive result is observed, consult your risk management plan or seek advice from a water specialist immediately.

A positive test result indicates that *Legionella pneumophila* serogroup 1 was present in the sample above the detection limit. The test does not differentiate between viable (living) and non-viable (dead) organisms. The test will detect viable but non-culturable bacteria which are not detectable by traditional

Positive test result



Test line

Control line

Negative test result



laboratory techniques. A positive result does not necessarily mean that viable bacteria are present.

Negative Results

A negative result indicates that *Legionella pneumophila* serogroup 1 was not detected and the concentration was below the detection limit of the test. A negative result does not necessarily mean that bacteria are totally absent.

A negative result does not mean that the system is completely free from risks associated with *Legionella* bacteria.

The test only detects *Legionella pneumophila* serogroup 1. The test does not detect the presence of other *Legionella* species or serogroups.

Invalid tests

In the unlikely event that a test does not show any red lines, or if it only shows a line at the end closest to the sample window, or if the line furthest from the sample window is very faint, then **the test result is invalid**. Repeat the test.

You can visit www.hydrosense.biz, contact your supplier or email info@hydrosense.biz to troubleshoot the test.