

Direct Legionella Field Test™ Kit

This kit is designed to test for Legionella in risk areas identified by CDC* such as:

- Domestic and industrial hot and cold water systems.
- Cooling towers.
- Decorative fountains, hot tubs and pools.
- Sinks and showers.
- Misterters, sprinklers, air washers, humidifiers and others.



*The Centers for Disease Control and Prevention (CDC) is a federal agency that conducts and supports health promotion, prevention and preparedness activities in the United States, with the aim of improving overall public health.

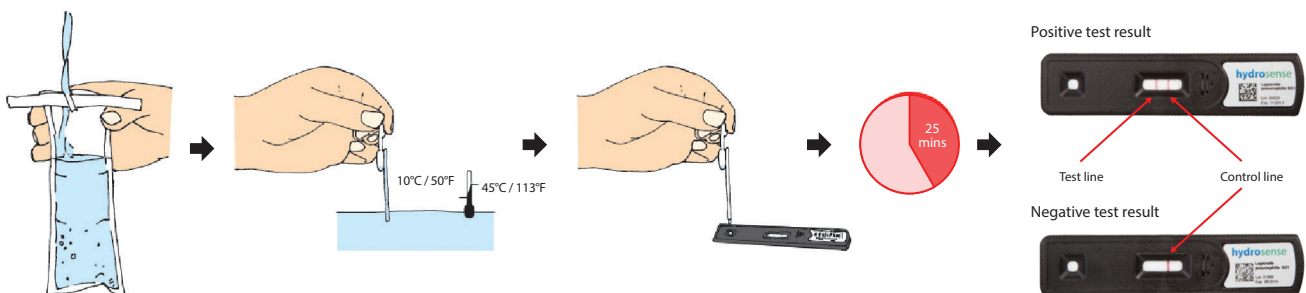
Direct Legionella Field Test™ product code 100104

The test kit contains everything required to perform 10 tests — including sample collection containers and disposable pipettes.

- Test any water system for Legionella pneumophila serogroup 1 (LpSG1), including hot and cold water systems and industrial and domestic water systems.
- The sensitivity of the test is 100,000CFU/L
- The test detects Viable-But-Non-Culturable Bacteria and Legionella SG1 in all stages of its life-cycle.
- No need to measure or dilute solutions.
- Provides straightforward results, on site, within 25–35 minutes.
- The test is simple to use, no interpretation required.
- The test facilitates immediate understanding and response to system water conditions and safety.
- The test helps minimise delays and downtime and reduces the risk of outbreaks, fines and litigation.
- Regular use increases confidence in Legionella controls.
- The smartphone App reader provides independent record of results (Download Hydrosense App for free from the App store or Play Store).

The Hydrosense Legionella Field Test™ uses Lateral Flow Immunochromatographic Assay (LFICA) technology to detect the presence of cell surface antigens from *Legionella* bacteria. It uses Legionella antibodies, tagged with red nanoparticles, which bind to any bacteria found in the sample and make them visible on a line on the device. The test works just like a pregnancy test - one line indicates a negative result and two lines indicate a positive result.

Alternative versions of the test for specialist applications are also available.



Direct Legionella Field Test Kit Product Details

Bacteria detected	<i>Legionella pneumophila</i> serogroup 1													
Detection method	Lateral flow immunochromatographic assay													
Limit of detection	100,000 CFU/L (100 CFU/mL)													
Specificity	<p>Tested against a wide range of waterborne bacteria, including <i>Acinetobacter calcoaceticus</i>, <i>Aeromonas hydrophila</i> subsp. <i>hydrophila</i>, <i>Bacillus subtilis</i>, <i>Burkholderia cepacia</i>, <i>Citrobacter freundii</i>, <i>Citrobacter koseri</i>, <i>Escherichia coli</i>, <i>Enterobacter cloacae</i>, <i>Klebsiella oxytoca</i>, <i>Pseudomonas aeruginosa</i>, <i>Pseudomonas fluorescens</i>, <i>Pseudomonas putida</i>, <i>Pseudomonas stutzeri</i>, <i>Ralstonia pickettii</i>, <i>Raoultella terrigena</i>, <i>Streptococcus pyogenes</i>, <i>Yersinia ruckeri</i>.</p> <table border="1"> <thead> <tr> <th>Organism</th> <th>≥cfu/mL</th> </tr> </thead> <tbody> <tr> <td>L.p Sg-2,3,8,11,13,14</td> <td>1.00E+08</td> </tr> <tr> <td>L.p. Sg-4,5,6,7,9,10,15</td> <td>1.00E+07</td> </tr> <tr> <td>L.p. Sg-12</td> <td>8.00E+06</td> </tr> <tr> <td>S.aureus</td> <td>2.00E+08</td> </tr> </tbody> </table> <p>The Hydrosense legionella pneumophila Sg-1 test has been shown to produce weak positive results with other legionella pneumophila serogroups at the cfu/mL stated in the above table.</p>		Organism	≥cfu/mL	L.p Sg-2,3,8,11,13,14	1.00E+08	L.p. Sg-4,5,6,7,9,10,15	1.00E+07	L.p. Sg-12	8.00E+06	S.aureus	2.00E+08		
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Test volume	100 µL Exact volume disposable pipette provided													
Sample parameters	<table> <tbody> <tr> <td>pH range</td> <td>5–10</td> </tr> <tr> <td>Sample temperature range</td> <td>15–45 °C (59–113 °F)</td> </tr> <tr> <td>Environmental operating range 1</td> <td>5–40 °C (59–104 °F)</td> </tr> <tr> <td>Free chlorine concentration</td> <td><5ppm</td> </tr> <tr> <td>Total Alkalinity</td> <td><1000 ppm</td> </tr> <tr> <td>Total Hardness</td> <td><1000 ppm</td> </tr> </tbody> </table>		pH range	5–10	Sample temperature range	15–45 °C (59–113 °F)	Environmental operating range 1	5–40 °C (59–104 °F)	Free chlorine concentration	<5ppm	Total Alkalinity	<1000 ppm	Total Hardness	<1000 ppm
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Biocides	<p>The product has been tested with a range of common biocides and biodispersants used in <i>Legionella</i> control, at their normal maximum operating concentration. Active ingredients tested include: glutaraldehyde, didecyl-dimethyl-ammonium chloride, isothiazoles, dibromonitripropionamide, ionic and non-ionic surfactants.</p> <p>The test gives a false positive if used with polymeric biguanide or THPS. It should not be used to test such systems.</p>													
Operator time	<2 minutes													
Test time	25 minutes													
Shelf life	18 months from date of manufacture, when stored at room temperature (<30°C) in original packaging. All test strips are hermetically foil-wrapped and with a printed expiry date.													