

Sentinel R700

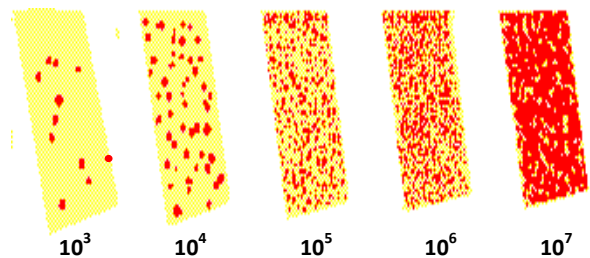
Sanitiser and Biocide for Heat Pump Systems

Application Guidelines

Ground Source Heat Pumps

New Systems

1. Flush out the new system to remove any debris that may remain from the assembling of the system.
2. During the first filling of the new system with water add 1 litre of the Sentinel R700. For systems larger than 300 litres add 1 litre per 300 litres.
3. Circulate the system for 30 minutes to allow mixing and distribution of the Sentinel R700 throughout the whole system.
4. Use the Sentinel R700 Test Kit and measure the concentration of Sentinel R700 using the test strips. The correct dose will give a reading of 100ppm on the test strips. If the reading is found to be below 100ppm top up the system with Sentinel R700 until a reading of 100ppm is achieved.
5. Take a sample of water from the system and measure the bacterial levels using a dipslide from the Sentinel R700 Test Kit. Using the comparison charts read and record the result after 48 hours storage period.
6. If the dipslide result is showing 10^3 cfu/ml or above revisit site, test for Sentinel R700 and ensure that the reading is at 100ppm or above.
7. Fill the system with Sentinel R500 thermal fluid and circulate to remove all the entrapped air. Take a sample of thermal fluid from the system and measure the bacterial levels using a dipslide from the Sentinel R700 Test Kit. Using the comparison charts read and record the result after 48 hours storage period.
8. At the annual service a dipslide test to confirm satisfactory bacterial levels should be taken.



Systems with Degraded Thermal Fluid

1. In a system where degradation of the thermal fluid has occurred the system should be cleaned and flushed by following the Sentinel R800 Ground Source Heat Pump System Flushing Fluid Application Guidelines* to remove all of the degraded thermal fluid.
2. If the water to be used for flushing out the R800 cleaning fluid is suspected to be contaminated with bacteria, add 1 litre of the Sentinel R700 to the flush water. (For systems larger than 300 litres add 1 litre of Sentinel R700 per 300 litres of system water).
3. After complete removal of the R800 cleaning fluid (check that pH is the same as the feed water) use the Sentinel R700 Test Kit and measure the concentration of Sentinel R700 using the test strips. The correct dose will give a reading of 100ppm on the test strips. If the reading is found to be below 100ppm top up the system with Sentinel R700 until a reading of 100ppm is achieved.

4. Circulate the flush water for at least 1 hour.
 5. Fill the system with Sentinel R500 thermal fluid and circulate to remove all the entrapped air. Take a sample of thermal fluid from the system and measure the bacterial level using a dipslide from the Sentinel R700 Test Kit. Using the comparison charts read and record the result after 48 hours storage period.
 6. At the annual service a dipslide test to confirm satisfactory bacterial levels should be taken.
4. Add the required volume of Sentinel R600 and circulate the system for 30 minutes to allow mixing and distribution of the treatment throughout the whole system.
 5. Use the Sentinel R700 Test Kit and measure the concentration of Sentinel R700 using the test strips. The correct dose will give a reading of 100ppm on the test strips. If the reading is found to be below 100ppm top up the system with Sentinel R700 until a reading of 100ppm is achieved.
 6. Take a sample of water from the system and measure the bacterial levels using a dipslide from the Sentinel R700 Test Kit. Using the comparison charts read and record the result after 48 hours storage period.
 7. If the dipslide result is showing 10^3 cfu/ml or above revisit site, test for Sentinel R700 and ensure that the reading is at 100ppm or above.
 8. At the annual service the concentration of Sentinel R700 should be checked using the test strips. If the reading is found to be below 100ppm top up the system with Sentinel R700 until a reading of 100ppm is achieved. A dipslide test to confirm satisfactory bacterial level should be taken.

**Technical Information sheet available at www.sentinel-solutions.net or available from Sentinel Performance Solutions Ltd.*

Air/Water Heat Pump Systems

New Systems

1. Flush out the new system to remove any debris that may remain from the assembling of the system.
2. During the first filling of the new system with water add 1 litre of the Sentinel R700. For systems larger than 300 litres add 1 litre per 300 litres.
3. Circulate the system for 30 minutes to allow mixing and distribution of the Sentinel R700 throughout the whole system.

NB For advice as to use of dipslides and Sentinel R700 Test Strips refer to the Sentinel R700 Test Kit instructions.