

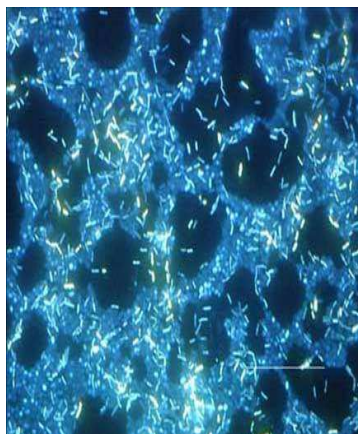
# SafeSol3 The Ultimate Legionella Killer

ISSUED  
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SafeSol3 is a novel water system disinfectant based on hydrogen peroxide stabilised and catalysed using trace levels of silver. The product is safe to handle and easy to use making it an ideal product for people who need to carry out water system disinfection but have little experience of handling chemicals. While the product is absolutely safe to use we recommend using gloves and eye protection when using the chemical.

## The Problem with Biofilm



When a water system is commissioned bacteria present in the water very quickly attach themselves to the internal surfaces by secreting polysaccharide. The bacteria then grow in columns in a matrix of the polysaccharide slime.(see photo micrograph). This allows nutrients in the water to reach the bacteria. Larger organisms like protozoa graze the biofilm selectively eating bacteria. Legionella lives in biofilm in water systems. It is also eaten by amoebae. Once inside the amoebae it destroys their digestive system and uses the amoebae as a host where it breeds. The amoebae will eventually contain so many bacteria that it bursts releasing thousands of legionella into the water.

## SafeSol3 Legionella and Biofilm Eradicator

Independent tests show that Safesol will kill free swimming legionella and other bacteria in water, it kills the amoebae which act as Trojan horses and it removes and treats biofilm.

### How do you Use it?

Generally SafeSol3 is applied via the cold water storage tank where it is mixed with the water to obtain a concentration of 100ppm hydrogen peroxide. The quantity you require to add is based on the volume of the CWST multiplied by 1.3 to include the calorifier and pipework (1.1 if there is no calorifier) and the amount is based on the table below.

System Volume	Volume of SafeSol3 to obtain 100ppm hydrogen peroxide	Litre containers of SafeSol3 required to be purchased
200 litres	500ml	1
300 litres	1 litre	1
500 litres	1.5 litres	2
1000 litres	3 litres	3

The water is drawn to the furthest outlet and tested with a simple test strip until it registers 100 ppm hydrogen peroxide. You should then test all other building outlets until they reach this peroxide level. When you have obtained 100ppm at all outlets the disinfection is complete.

SafeSol3 can be used for main line disinfection. (See Mains Line Disinfection sheet)

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