

# PREVENTIVE DISINFECTION AGAINST LEGIONNELLA

—  
IN RESIDENTIAL  
PROPERTIES



**Analytech<sup>®</sup>**

THE FUTURE OF DISINFECTION



” When one of our properties suffered a Legionella outbreak, we flushed hot water through all the pipes, showers and taps and replaced hoses and shower heads. Unfortunately, this did not resolve the problem and bacteria spread throughout the building, including the cold water pipes.

We have now installed the Anolytech system to eliminate the bacteria and prevent new outbreaks. ”

*Patrik Hjelm, Property Manager for Region Kronoberg*

#### ABOUT ANOLYTECH

Since 2005, Anolytech has developed a sustainable and environmentally friendly disinfection technology based on water, salt and electricity which eliminates the need for disinfection with harmful chemicals. Anolytech's system produces a pH-optimised hypochlorous acid, AnoDes, that kills bacteria, viruses, spores, mould and fungi effectively and stops the growth of biofilm in water. AnoDes is produced directly in a system rented from Anolytech that is installed on site at the customer. The sustainable circular production process ensures that the customer has a reliable supply of disinfectant while also minimising the handling of chemicals and unnecessary packaging and the transport of hazardous goods.

AnoDes is EU-certified and not only disinfects drinking water and room areas, but also provides a gentler (EN 1500), more effective alternative to alcohol-based hand disinfectants. Anolytech now supplies disinfectant solutions to the farming sector and food industry, hotels and properties, plus the public sector and healthcare providers in Sweden and Europe.



# Environmentally friendly preventive disinfection against Legionella – that meets EU requirements.

**EU demands on property owners to prevent the spread of Legionella have been tightened up in recent years, which means that to meet these requirements, property owners must take preventive action against bacteria outbreaks today. In other words, it is no longer sufficient to simply manage the hot water temperature and then take reactive action in the event of a confirmed Legionella outbreak. The unique Anolytech system acts preventively by continuously releasing small doses of environmentally friendly AnoDes into the water system. Installing an Anolytech system in a property will guarantee both bacteria-free water and compliance with EU rules.**

## SAFE, BACTERIA-FREE WATER SYSTEMS IN RESIDENTIAL ENVIRONMENTS

Being able to guarantee that the water supply is bacteria-free is a fundamental requirement in a property. Residents should be able to feel confident that the water in the property is safe to drink and use without potentially ingesting harmful and unhealthy bacteria. That being said, this is no guarantee that the water cannot become contaminated inside the property and spread harmful infection in kitchens, bathrooms and shower environments, even if the incoming water is of high quality.

Legionella bacteria can cause infections such as legionnaires' disease, a serious form of pneumonia. Bacteria are spread to the lungs by droplets of water that are inhaled via shower heads, hot tubs, tap aerators and similar.

The environmentally friendly Anolytech system continuously disinfects the water as a preventive measure, thereby creating peace of mind for people in all residential environments where water is used.

## TOUGHER EU RULES ON LEGIONELLA

WHO has classified Europe as a problem area for Legionella, which has persuaded the EU to tighten up the rules concerning the control and prevention of bacteria.

To meet the previous requirements in the rules, all property owners had to do was perform their own regular checks. However, these checks were not performed frequently enough in many cases, and measures were not implemented in time as a consequence. Regularly checking the water temperature in water heaters/HWC systems is no longer sufficient purely in terms of legal compliance.

Today, property owners are required to take appropriate steps to prevent outbreaks of infection in general, and predetermined plans are in place to implement

measures in the event of infection outbreak. These stricter rules are part of the new Drinking Water Directive, together with the EU Right2Water.

## DIFFICULT AND COSTLY TO REMEDY

Legionella bacteria can enter both cold and hot water pipes, regardless of the age of the water system. And water systems can still harbour Legionella even if the water heater/HWC system is heated to over 70 degrees Celsius.

Flushing the system with hot water is not sufficient either, as this fails to eliminate bacteria at end points in the system, such as shower hoses, shower heads and taps. If the water system also has problems with biofilm, this creates an environment in which bacteria flourish and can spread to the surrounding water.

A Legionella outbreak often has serious consequences for people living in the building. The constant presence of AnoDes in the water system radically reduces these risks and makes it simpler to perform quality assurance of the water. The presence of AnoDes also means there will be far less need to replace shower heads and shower hoses as frequently as before.

## SAVE WATER AND ENERGY

With an Anolytech preventive system, you no longer need to take reactive action to try to eliminate bacteria by flushing pipes and pipework, which saves large amounts of water. The system also delivers substantial energy savings. As the Anolytech system does not require high temperatures to kill bacteria, the temperature in the hot water system can be lowered by 5 to 10 degrees Celsius, with associated significant energy and cost savings.

Reducing energy consumption makes properties more sustainable and able to meet official requirements to reduce energy usage in line with the Sustainable Development Goals of Agenda 2030.

## ANODES IS EFFECTIVE AGAINST BACTERIA AND BIOFILM

The unique Anolytech system ensures water is bacteria-free by continuously releasing antimicrobial AnoDes into the water pipes. Even in small doses, AnoDes kills bacteria, viruses, spores, mould and fungi effectively and stops the growth of biofilm that otherwise risks forming in the water system and providing a fertile environment in which bacteria can thrive.

And as AnoDes is produced using nothing more than water, salt and electricity, it does not contain any hazardous chemicals. This means AnoDes is both environmentally friendly and totally harmless to humans. Moreover, AnoDes does not affect the taste or odour of the water.

AnoDes is produced on site directly in a system that you rent from Anolytech. This is installed on site and connects to the water supply in the building.

Anolytech and AnoDes comply with Swedish National Food Agency regulations (2001:30) on drinking water, as well as EU drinking water regulations.

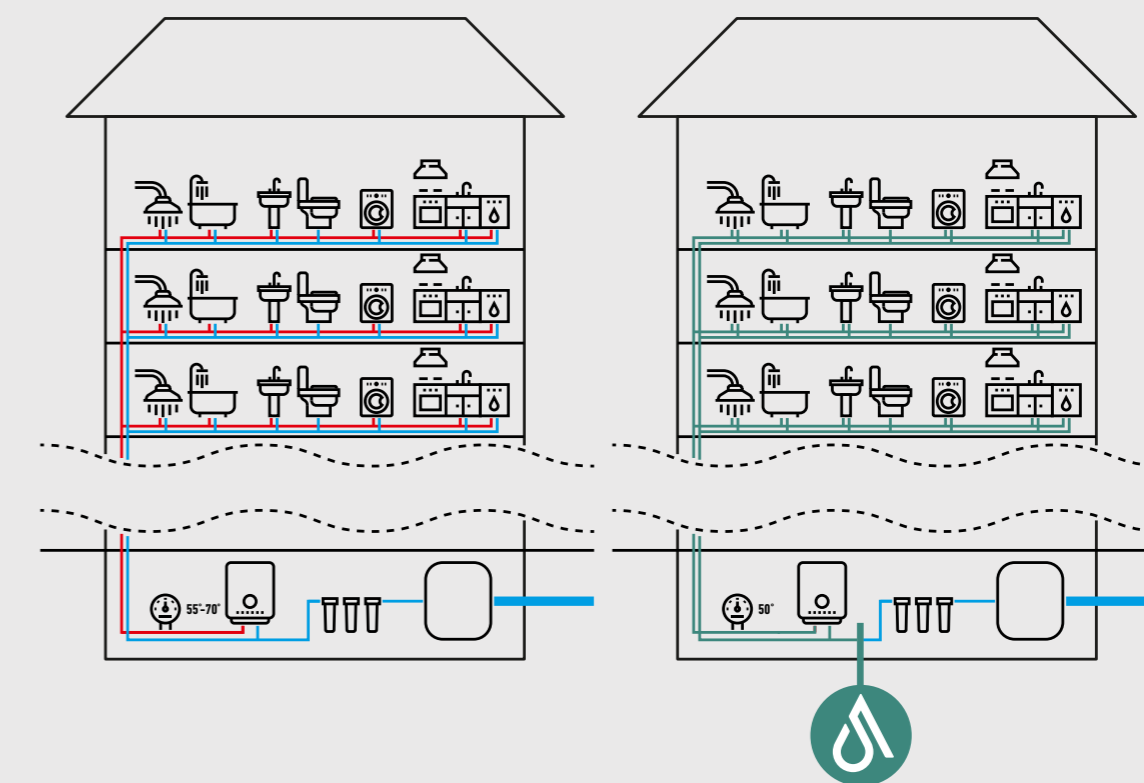
## PREVENTIVE PROTECTION AND LONG-TERM EFFECTIVENESS

The Anolytech system differs from traditional methods where disinfection takes place only after problems have arisen and pipes and other parts of the system have to be replaced or flushed clean, often using harmful chemicals. Such initiatives eliminate the symptoms at the time, but they fail to resolve the fundamental problem; that bacteria can enter and disperse in the water system at any time.

With an Anolytech system, the problem is eliminated entirely as small quantities of AnoDes are a constant presence in the water pipes, killing bacteria. AnoDes also acts as a protective barrier if the incoming water were to be temporarily contaminated. AnoDes then provides preventive protection so that bacteria are unable to grow.

We can test for the presence of Legionella in the pipes in the property before installing the system. Once Anolytech's system is installed, AnoDes will kill all the bacteria in the water system.

## HOW LEGIONELLA SPREADS IN PROPERTIES



- Legionella bacteria enter properties via the incoming water supply and then spread through the cold water pipes.
- Hot water from the water heater can kill some of these bacteria, but this is no guarantee that the property will become free of Legionella.

- Installing an Anolytech disinfection system that continuously releases small quantities of AnoDes into the water system will eliminate bacteria entirely from the property and clear the pipes of biofilm.



### DID YOU KNOW

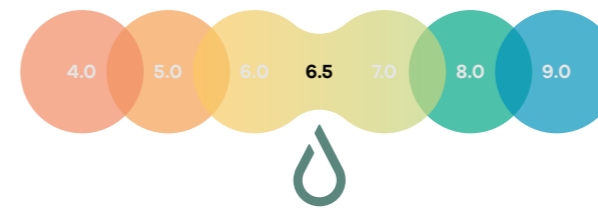
- There are around 60 different species of Legionella bacteria.
- Using Anodes in the water system can reduce water and chemicals usage while also saving energy.
- Concentrated Anodes is 200 times more effective than chlorine in reducing bacterial populations.
- Anodes attacks bacteria and other harmful microorganisms by attacking proteins in the cell membranes, causing the cells to rupture and die.
- Disinfection initiatives implemented when problems have arisen can be costly and time consuming. With Anodes, disinfection is a continuous preventive process that saves both time and money.
- When Anodes is consumed, it reverts to its constituent parts: 99.95% water and 0.05% biodegradable substances. This means Anodes is completely risk-free for both humans and our planet.

### WHY ANODES IS SO EFFECTIVE

Anodes is a pH-optimised hypochlorous acid consisting of water and table salt (NaCl) produced directly on site. This carefully controlled pH level is what makes Anodes such an effective disinfectant. No other disinfection solution on the market can control the pH value of the water with the same precision, which means we can guarantee effective disinfection that will not harm humans, no matter what the quality of the incoming drinking water supply.

← Danger of corrosion

Reduced power →



### RELIABLE ON-SITE DISINFECTION

The Anolytech system is based on Anodes being produced on site at the property. This means that disinfection can always be deployed and you do not need to handle hazardous chemicals or deal with unnecessary packaging. The system consists of an easy-to-install wall-mounted control unit, salt holder and blending module. All you need is a power supply and connection to the water and wastewater systems. Once commissioned, the system only needs to be topped up with salt tablets: everything else is automated in a process that continuously releases small quantities of Anodes into the drinking water system. The system design and simple operation guarantee reliable production of Anodes, while the residual products are so harmless they can be discharged together with wastewater.

### RENTAL CONTRACT WITH LOW OPERATING COSTS

The production system is rented from Anolytech, and the cost is based on water consumption at the property. The system is very efficient in terms of energy and salt, which ensures low operating costs over time. The system is installed by our service technicians at a suitable location at the property. The whole system is supplied as a complete package that includes installation, servicing and spare parts – plus a Performance Warranty.

### CIRCULAR PROCESSES

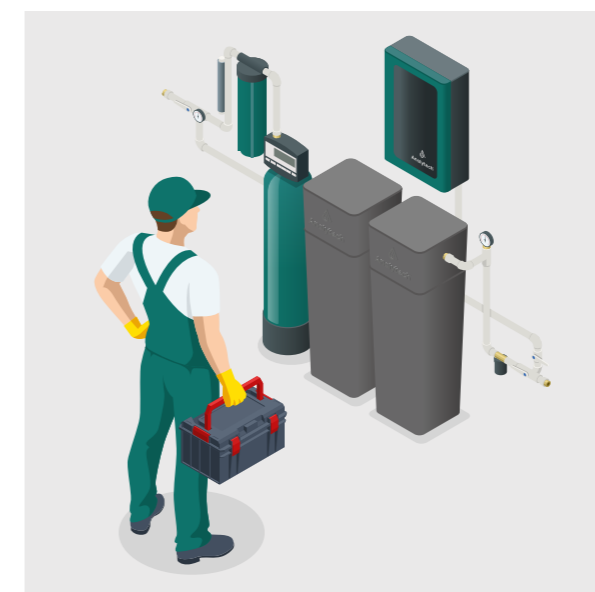
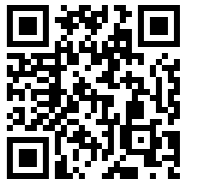
Traditional disinfection is often a linear process where environmentally harmful substances are transported, used and produce waste that has to be disposed of. In contrast, the Anolytech system is a sustainable circular process where Anodes is produced on site using water, salt and electricity. Residual products are totally harmless for the environment and can be discharged into the wastewater system.

### EUROPEAN STANDARDS AND CERTIFICATES

Anodes meets applicable European standards for disinfectants and is approved in accordance with Article 95 of the EU Biocidal Products Regulation.

Use the QR code to view and download current directive documents and certificates.

<https://anolytech.com/certificate/>



### PERFORMANCE WARRANTY

The Anolytech Performance Warranty guarantees that the system will work throughout the entire rental period. Over the years, our systems have produced and released Anodes into systems belonging to hundreds of businesses, and we guarantee that your system will produce the right amount of Anodes in the right strength, and that the right dose will be released into the drinking water system. We maintain and service our systems at regular intervals and notify users when it is time to order more consumables. We are always on hand, and monitor and continuously control systems and functions.



# Environmentally friendly disinfection that prevents Legionella outbreaks

Anolytech offers next-generation disinfection systems that kill Legionella bacteria and other harmful microorganisms effectively and in an environmentally friendly way. The system uses just water, salt and electricity to produce AnoDes, a disinfectant solution that eliminates Legionella in water pipes and prevents the spread of such bacteria between apartments.

- **Guarantees bacteria-free water**
- **Environmentally friendly, circular process**
- **Compliant with the EU Drinking Water Directive**
- **Compliant with Swedish National Food Agency regulations on drinking water**
- **Approved to EU standards and the Biocidal Products Regulation.**
- **Produced on site at the property**
- **Offers major savings on energy and water**