

Water disinfectant wipes out legionella in hospital's water supply

October 17 2017, by Stephanie Richards



The Ecas4-Anolyte solution has a high redox power and is genuinely pH neutral and non-corroding due to an unique patented 4-chamber system.

A water disinfectant company has successfully eliminated Legionella from a South Australian hospital's water supply using a pH neutral electrochemical solution, which can also be used to disinfect food.

Ecas4 [technology](#) was installed at the North Eastern Community Hospital in South Australia's capital Adelaide in May last year to eradicate pathogens such as Legionella from the hospital's [water](#) supply.

The technology has since removed systematic Legionella contamination of the hospital's water distribution system and cut its gas bill by one third (about AU\$7000 a month).

Ecas4 technology produces a pH neutral and electrochemically active disinfectant without the use of toxic chemicals using a patented Membrane Electrolytic Reactor System. The reactor features allow the typical synthesis of a neutral Anolyte (pH 7), which eliminates pathogens and biofilm when injected into water pipes.

The treated water can be used for drinking, cleaning and manufacturing purposes at any temperature.

Ecas4 Director Tony Amorico said the reactor system was designed to produce a highly reliable disinfectant for use across the health and agricultural industries.

"There are other versions of the technology available on the market, but they do not provide the same level of reliability," he said.

"Our technology produces an aqueous solution with neutral pH. All the parts involved in the synthesis have been optimised to guarantee the safety of the final user."

The South Australian-based Ecas4 company bought the technology off Italian designers in 2007, and have since increased the reactor's capability from 80L/h up to 160L/h. The active agent concentration in the solution has also increased.

Amorico said the company has also recently expanded into the food services industry.

"We are providing services to seafood, and fruit and vegetable shops and

are now working on a program in child care centres to reduce the spread of pathogens for surface sanitation using a dry fogging system," he said.

A joint study with researchers from the University of South Australia and University of Adelaide found the Ecas4 treatment extended the shelf life of Southern Australian King George Whiting and Tasmanian Atlantic Salmon fillets by two and four days respectively.

The study also found the application of Ecas4 significantly reduced total bacterial load and specific spoilage organisms on the fish.

"We are quite excited to set up a new manufacturing facility in Adelaide for the local and Asian markets. We believe there are global opportunities in setting up servicing facilities for the world in food," said. Amorico.

Provided by The Lead

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