

ECA. Make your Own Cleaner, Degreaser and Sanitizer out of Water and Salt  
By, Samantha Levy

At the end of a long shift, wouldn't you love a breakdown that doesn't rely on expensive and toxic chemicals that burn your lungs and skin? Would you sleep better at night knowing that the wine glasses your guests drink out of are free from all chemical detergents and sanitizers, while feeling confident that what you are flushing down the drain is effective, yet safe for the aquatic ecosystem (part of which you likely serve at your restaurant)? Wouldn't you love a cleaner, degreaser and sanitizer that costs less than a penny per gallon to produce? Too good to be true? Thanks to new technology, it is not!

ECA is electrochemically activated brine, or water and salt that has had an electrical charge passed through it to create a non-toxic sanitizer and a non-toxic cleaner and degreaser. The way it works is simple science, the negative sodium ions are attracted to the negative pole, and the positive chlorine ions are attracted to the positive pole creating a Sodium Hydroxide cleaner and degreaser (-), and a Hypochlorous acid based disinfectant and sanitizer (+). These two new-made non-toxic substances can then be used to clean a grease-caked grill, wash a sticky floor, scrub down and sanitize a bathroom and clean and sanitize all flatware, glassware and silverware in the restaurant. It can be used to clean to prevent pests and rodents. But the best thing is that these two substances carry all of the power of bleach or quaternary ammonium chloride and other common cleaning chemicals without the painful side effects from using toxic chemicals: burning skin, rashes and breathing problems. And within a few months, the solutions will disassociate back into what they always were: tap water and salt.

This exciting technology is not new, and it is currently being used by large institutions such as schools, hospitals, hotels, supermarkets, bottling facilities, food manufacturers and restaurants. Whole Foods in Manhattan is one well known client which uses these substances to clean and sanitize their food service-ware. This company, concerned with the health and safety of its workers and customers, is part of a forward thinking movement which recognizes that it isn't necessary to have toxic chemicals to get a cleaning and sanitizing job done. In fact, the sanitizer is an EPA approved hospital grade disinfectant, and think of how effectively hospitals need to disinfect.

At this point you may be thinking it sounds too good to be true. Two of the only drawbacks with this technology are that the solutions lose their potency within 30-120 days and that an ECA machine is a costly investment. The first drawback is easily taken care of by making only what you will use, and by employing testing strips to assure potency. I would even argue that this isn't a drawback at all, the fact that the solutions reassign into harmless water and salt is the best thing about it. The second hurdle is the classic discussion about green investments: the cost upfront is high, but it will save you thousands in chemicals unbought in the future. Not only that, but you will be contributing to a restaurant environment and planet which is safer for your staff, your customers and the aquatic ecosystem. Staff retention and customer loyalty is shown to improve when restaurants adopt more sustainable practices and truly commit to the good of the community it serves. Finally, in a world of limited resources, conservation, reuse and preservation are of utmost importance. ECA is just another step in the right direction.