



FOOD PROCESSORS CAN CLEAN MORE SAFELY AND SUSTAINABLY WITHOUT COMPROMISING EFFECTIVENESS USING ELECTRO-CHEMICAL ACTIVATION TECHNOLOGY

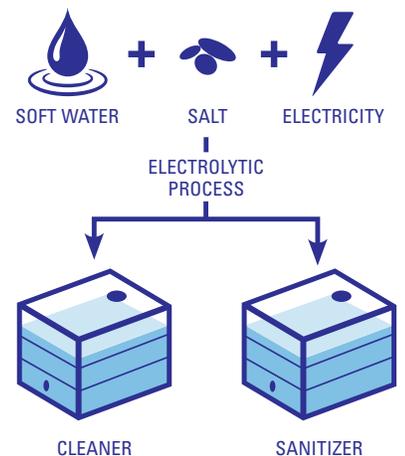
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The challenges facing food processors are plentiful. In addition to keeping up with ever-changing consumer tastes, food safety remains a top priority. Worker recruitment and retention are increasingly difficult, and there is increased pressure to operate more sustainably. The use of electro-chemical activation (ECA) technology in sanitation is helping many processors address these issues without having to make sweeping procedural changes or incur additional cost.

OVERVIEW: ON-SITE GENERATION SYSTEM FOR THE PRODUCTION OF POWERFUL CLEANERS AND SANITIZERS

New, proprietary ECA technology has been integrated into a compact system designed for use in manufacturing facilities. The system produces a sodium hydroxide cleaner and a hypochlorous acid sanitizer in ready-to-use concentrations. The solutions are:

- As effective, if not more effective, than traditional chemicals. Killing 99.999% of common foodborne bacteria, the solutions are direct replacements for caustic cleaners and sanitizers
- Safe. The solutions are non-irritating to skin and eyes and fragrance-free for improved worker safety
- Drain and disposal friendly
- Approved for use in organic food processing
- Salt-free and safe for use on stainless steel
- Suitable for use in CIP systems. The solutions can also be stored in tanks and used with spray carts, pressure washers, bottles and more
- Versatile. Can be used to clean and sanitize equipment, floors, walls, drains, trucks and more
- Compatible with one another, so the need to rinse between cleaning and sanitizing is eliminated
- Residue-free



All systems using ECA technology aren't created equal, so be sure to do your research. Many systems do not produce solutions that are safe for use on all surfaces – especially stainless steel.

A CLOSER LOOK AT THE BENEFITS OF ECA TECHNOLOGY IN SANITATION

As we delve deeper into the details of using ECA solutions, it is important to reiterate that there are big differences in the systems that produce them and the electro-chemical technology used. The rest of the information provided in this paper is specific to the Klarion™ system from Spraying Systems Co. Other ECA systems may share some similarities with the Klarion system, so be sure to ask about each attribute of interest to you. The differences between systems can be significant.



FOOD SAFETY

- The Klarion cleaner replaces concentrated chemical caustics. The Klarion sanitizer is as effective or better than toxic and dangerous alternatives, such as quat or PAA. Both the cleaner and the sanitizer are residue-free
- Traditional chemicals contain high levels of active ingredients to ensure effectiveness even when stored for long periods of time. Klarion solutions are produced on-site and on demand and are at full potency when used. As a result, microorganisms can be effectively eliminated by the Klarion solutions containing lower levels of active chemicals
- Klarion solutions saponify and remove organic fats and oils, and denature and remove proteins
- In side-by-side cleaning comparisons, Klarion solutions clean as effectively – if not more effectively – than harsh chemicals. Users report better ATP and CFU test results in addition to visibly cleaner surfaces



WORKER SAFETY, PRODUCTIVITY, RECRUITMENT AND RETENTION

Use of Klarion ECA solutions eliminates exposure to harsh chemicals, resulting in safer, happier, healthier and more productive workers.

- Employees can clean and sanitize equipment free from cumbersome personal protection equipment (PPE). This makes the cleaning and sanitizing process much more comfortable, particularly when cleaning in hot environments. The elimination of PPE also means workers can spend more time cleaning and less time adding/removing safety gear
- The use of the Klarion system eliminates the need for workers to dilute concentrated chemicals. The Klarion ECA solutions are produced in ready-to-use concentrations
- Traditional chemicals can trigger mild to severe allergic reactions to skin and eyes. These health problems can result in worker absences, worker's compensation claims and reduced productivity. The use of Klarion ECA solutions eliminates the costly and dangerous risks associated with traditional chemicals
- Training workers to use the Klarion system and solutions is easy and straightforward. System training can be completed in less than an hour, and cleaner and sanitizer usage training requires just a few minutes





SUSTAINABILITY IMPROVEMENTS

- Klarion™ ECA solutions are drain and disposal friendly. There is no need for wastewater treatment or the risk of fines for improper disposal. In fact, processors gain the added benefit of highly effective drain sanitation during Klarion sanitizer disposal
- Clean labels and organic production are high priorities for many food companies. Klarion ECA solutions are approved for organic production
- Additional benefits of on-site generation of Klarion solutions include the elimination of pollution due to the transportation of chemicals and the disposal and recycling of chemical containers



ECA COST SAVINGS

Changing sanitizing procedures and equipment can be disruptive and costly. That's not the case with the Klarion system. No changes to standard operating procedures are required. Plus:

- Processors pay based on the volume of solutions produced. There is no equipment purchase required
- Systems are monitored remotely by the manufacturer; performance issues are addressed in real time
- Freight charges, ordering and inventory management of chemicals and PPE expenses are eliminated
- Chemical container disposal/recycling costs are eliminated
- Worker's compensation claims and unscheduled absences due to chemical exposure are eliminated
- Valuable floor space is freed up – the need to store chemical containers is eliminated
- Water use is reduced; no rinsing is required between cleaner and sanitizer use, and there is no filmy residue left behind
- Wastewater disposal costs are reduced

KLARION ECA SOLUTIONS ARE IDEAL FOR CLEANING AND SANITIZING IN A WIDE RANGE OF FOOD PROCESSING PLANTS

BAKERY



MEAT/POULTRY



BOTTLING



SEAFOOD



ABOUT KLARION



Spraying Systems Co.

The Klarion™ system is one of several recent innovations for food processors introduced by Spraying Systems Co.® The company has a long-standing reputation for helping companies reduce waste, minimize downtime and improve cleaning efficiency and offers a wide range of products, including spray nozzles, spray guns, automated systems and tank cleaning equipment.

**For more information, visit klarion.com.
To speak with a Klarion sales engineer, call 630.517.1010.**



From ***Spraying Systems Co.***

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