

Aqueous Ozone Cleaning Systems



EPA Device Reg. #090379-NE-001

Using CleanCore for cleaning will reduce your carbon footprint – significantly.

Test after test have shown the proven performance of CleanCore Technologies™ aqueous ozone cleaning systems.

But these machines also help promote sustainability.

CleanCore’s aqueous ozone cleaning systems are safe for the environment. They eliminate the need to transport cleaning chemicals, which requires fuel and releases greenhouse gasses, as well as all the packaging materials used to package cleaning products.

And there are no “cradle to grave” issues. Aqueous ozone is safe to make, safe to use, and it evaporates or turns into oxygen after use.

Green Seal Certified

Omaha NE – October 20, 2016 – CleanCore Technologies LLC, which is emerging as one of the leading manufacturers of aqueous ozone cleaning systems in North America, announces that the solution generated from its two key products—the CleanCore CCT-Caddy and the CleanCore CCT 3.0 Fill Station—has been certified by Green Seal, one of the most respected green certification organizations in the country. Not only is the aqueous ozone produced by the CleanCore Caddy certified by WoolSafe®, because it is safe and effective when used to clean wool fibers, the solution has also been Green Seal certified, meaning it is safer to use for the user, building users, and the environment.

And the Caddy improves worker productivity because it can be used when needed/where needed, on-site and on-demand.

While the use of aqueous ozone for cleaning is relatively new, aqueous ozone is actually an old technology. In fact, it has been used for cleaning in one form or another for more than 100 years.

To bring us up to speed on aqueous ozone, CleanCore Technologies, a leading manufacturer of these systems, provides us with the following aqueous ozone timeline:

- **1785:** A Dutch chemist experimenting with water by “sparking” it with electricity notices it creates an unusual odor
- **1840:** Scientists realize this unusual odor is similar to the smell in the air after a thunderstorm, leading to the discovery of ozone
- **1850s:** The first experiments using aqueous ozone were to treat or purify water
- **1906:** The city of Nice, France, built the first water purification plant using ozone; it is still in use today
- **1940:** The number of ozone installations to treat water reaches 119 and increases to 1,043 by 1977 and nearly 2,000 by 1985
- **1984:** Ozone was used to clean and sanitize the swimming pools installed for the 1984 Olympic Games in Los Angeles
- **1996:** FDA clears use of aqueous ozone systems in food preparation facilities
- **2001:** FDA allows the use of aqueous ozone to sanitize food “contact surfaces” during or after the manufacture of food products
- **2008:** Aqueous ozone systems are introduced to the professional cleaning industry in Europe and North America
- **2016:** Aqueous ozone solution becomes Green Seal® certified.

“Having the aqueous ozone solution Green Seal certified is a major step forward for this technology,” says Matt Montag, national sales director for CleanCore Technologies. “It has proven to the professional cleaning industry this technology is green, safe, and effective.”

<http://cleancoretech.com/cleancore-technologies-llc-announces-aqueous-ozone-cleaning-solution-now-green-seal-certified/#more-907>

<http://cleancoretech.com/regulatory-information/>

The anti-microbial properties, and related commercial applications, of ozone and aqueous ozone have been known for well over a century. Ozone is widely used in both municipal and industrial wastewater treatment and is now widely used to sanitize drinking water. The first commercialized drinking water treatment facility was implemented in The Netherlands in 1893. Uses for ozone and aqueous ozone have expanded well beyond water treatment.

The following is a summary of various government regulations and approvals:

- In 1982, United States Food and Drug Administration (“FDA”) grants “GRAS” approval (generally recognized as safe) status for ozone disinfection of bottled water.
- FDA – The FDA and the Center for Food Safety and Applied Nutrition (“CFSAN”) announced on June 26, 2001, the Final Rule published in Federal Register (21 CFR Part 173, Docket No. 00F-1482) “The FDA amends the food additive regulations to provide for the safe use of ozone in gaseous and aqueous phase as an anti-microbial agent on food, including meat and poultry.” Further citing that ozone is approved as a secondary food additive permitted for human consumption.
<http://www.fda.gov/OHRMS/Dockets/98fr/062601a.htm>
- USDA – The United States Department of Agriculture (“USDA”) along with the Food Safety and Inspection Service (“FSIS”) declared on December 2001, USDA/National Organic Program (“NOP”) Ozone is listed in the NOP Final Rule (Subsection 205.605 (b) (20) p. 437 – nonagricultural (non-organic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients for food group(s)).” (b) Synthetics allowed: (20) Ozone. The use of Ozone on raw and ready-to-eat meat and poultry products just prior to packaging is acceptable. There are no special labeling requirements in regard to treated product.
- EPA & FIFRA – Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”) was first passed in 1947 with the intent of establishing procedures for registering pesticides with the U.S. Department of Agriculture and established labeling provisions. FIFRA mandates that Environmental Protection Agency (“EPA”) regulate the use and sale of pesticides to protect human health and preserve the environment. Under FIFRA’s definition of a pesticide, Ozone falls into this category and requires that a manufacturer of ozone devices register with the EPA. CleanCore’s EPA registration establishment number: #090379-NE-001
- Health Canada has issued a letter of no objection to the use of our solution as a sanitizer in Canada for the following applications: General Use Sanitizer, Hand Disinfectant, Personal Hygiene Cleaner, Drain Cleaner, Food Packaging Materials, Food Contact (Hard) Surfaces. These and other approvals are be used as directed in Canada. Health Canada reference numbers: IS13041201/02, IS13041209 to IS13041216 & IP13101701.

Hygiena ATP Test

<http://www.hygiena.com/other-products/ultrasnap-other.html>