

sales@ecoaquasolutions.com www.ecoaquasolutions.com +91 9811358731



APPLICATIONS OF ECOAQUA IN HOTELS

ECOAQUA is a "green" cleaning system for the housekeeping department, kitchen and in-house laundry operation of Hotels. The system employs electrolyzed water technology to convert tap water and normal table salt into a disinfectant (DESY) consisting of hypochlorous acid as an active disinfection ingredient, which is >80 times more powerful than chlorine bleach and yet harmless to the environment. The technology simultaneously produces a second stream that takes the form of sodium hydroxide that can be effectively used as a detergent and grease cutter for gas burners, chimneys and kitchen tiles. Both solutions created by the system are non-toxic. Some of the hotel specific applications of ECOAQUA are as follows:



HOTEL SANITATION

DESY water obtained from ECOAQUA is an on-site generated eco-friendly sanitizer that can replace all chemicals used for cleaning and sanitizing hotel rooms, common areas, floors, and bathrooms. Eliminating chemicals in hotels saves time, space, and money. Chemicals require purchasing, transporting, storing, and preparation. DESY is on-site generated anolyte and requires minimal storage space. The only ingredients needed are salt, water, and electricity.



SANITIZATION OF CONTACT SURFACES

DESY sanitizer is more effective than currently used sanitizing chemical. It is totally non- corrosive so, can be effectively applied to sensitive surfaces without compromising their integrity. Moreover, DESY is stable in solution, it can be applied through many different methods. In addition to direct application through spray bottles and mops, it can also be applied broadly using foggers.



LINEN SANITATION

DESY Sanitizer can replace harsh chemicals such as quaternary ammonium (quats) used commonly to sanitize linens. Quats can cause eye irritation and contact dermatitis. For about 5% of people, quats are an extreme sensitizer and can cause a variety of asthma-like symptoms. DESY Sanitizer is non-irritant and does not cause any respiratory or asthma-like symptoms.



EMPLOYEE SAFETY

Preparation of toxic concentrated chemicals can be a safety hazard for employees as they are respiratory and skin irritants. DESY is 100% safe for employees. It does not require any special handling. It is non-irritant and does not require gloves or masks. It can be applied directly with rags and mops or broadly by fogging and pressure spraying.

OTHER APPLICATIONS



Disinfection of waterlines, Pools & Spa's, Airhauling units etc.

APPLICATIONS OF DESY IN HOTEL KITCHENS

11



Antimicrobial activity of DESY against microorganisms in suspension. To be considered effective, a sanitizer applied must reduce microbial populations in suspension or in a biofilm by at least 5 or 3 orders of magnitude within a minute. DESY can provide 10 orders of reduction of microbes within 1 min of exposure time. Moreover, DESY can also remove spores (bacterial and fungal) at an efficacy of >6 log reductions.

2)



Antimicrobial activity of DESY against microorganisms on surfaces and utensils.

Surfaces and utensils are important sources of direct or indirect contamination of food products with pathogenic and spoilage microorganisms. DESY has known >6 log reduction bactericidal, fungicidal and sporicidal efficacy. It is totally non corrosive and can effectively decontaminate steel equipment's and other sensitive surfaces. Published reports have shown that DESY can effectively clear biofilms and can also disinfect, cutting boards, processing gloves, Stainless steel, tiles, glass, and vitreous china, Abattoirs (Slaughter houses) etc.

3)



Antimicrobial activity of DESY against microorganisms in processing water.

Water washing is widely used for produce and minimally processed vegetables, and accumulation of microorganisms in the processing water must be prevented. It is commonly observed that, Industrial processing water, had a higher microbial load and organic load than municipal supply. Addition of DESY to a concentration as low as 1% won't only remove all harmful pathogens but it will also prevent any formation of biofilms in storage tanks.

4)



Antimicrobial activity of DESY against microorganisms on food products. It has been shown that DESY can effectively disinfect food surfaces without affecting the integrity. It can disinfect vegetables and fruits, fish and sea food, Carcasses, raw meat, and ready-to-eat meat, eggs. DESY can also be applied as ice for lettuce and other green vegetables. It helps in long term storage by preventing development of microbial growth.

ELECTROLYZED WATER CERTIFICATIONS

- The U.S. Environmental Protection Agency (the "EPA") approved HOCL disinfecting solution (electrolyzed water or superoxidized water) as a high capacity disinfectant. (https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf)
- Is an FDA approved sanitizer that meets 21 CFR 178.1010.
- FDA approved under 21 CFR 173.315 for direct contact with processed foods.
- FDA approved for several indirect food contact applications under 21 CFR 172.892, 21 CFR175.105.
- FDA decision #692 allows for vegetable and fruit produce washing using Electrolyzed
 Water
- FDA approved for several indirect food contact applications under 21 CFR 176.170 and 21 CFR177.2800.
- FDA approved under 21 CFR 7120.1 for spray and water treatment for processing of beef, poultry and pork.
- Exempt by the EPA under 40 CFR 180.1054 for washing raw foods that are to be consumed without processing.
- Exempt by the EPA under 40 CFR 180.940 provided that the Electrolyzed Water is applied on a semi-permanent or permanent food-contact surface with adequate draining before contact with food.



ECOAQUA W-40 SEMI-AUTOMATIC

DEVICE

Is a portable equipment to produce ECOAQUA solution. The main component is electrolytic cells, which is an independent flow electrochemical cell. The solution is produced from the mixture of salt and water when it comes in contact with the surface of electrodes. This results in a change of balance in the structure of water and the formation of active oxygen and chlorine compounds.

TECHNICAL SPECIFICATIONS

Productivity,l/hour	40
Power Supply	220 V, 50 Hz
Power, W	400
Consumption of NaCI for 1 liter of ECAS	
Solution, gms/I	max.5
Concentration of initial NaCI solution,%	10
pH value	6.5-7.2
Concentration of active chlorine	
Compounds, Ca.x, %	001+ 0,05
Dimensions, (mm)	350 x 160 x 400
Weight, (kg)	4,8
Technical resort, (hours)	17000