

Applications of DESY in hospital setup

The concept of electrolyzing saline to create a disinfectant or antiseptics is appealing because the basic materials of saline and electricity are inexpensive and the end product (i.e., water) does not damage the environment. The main products of this water are hypochlorous acid (e.g., at a concentration of about 144 mg/L). The electrolysed water is nontoxic to biologic tissues. Electrolyzed Oxidizing Water is safe, non-toxic, and non-irritant and pertains to FDA, USDA, and EPA. It can be used to sanitize hospital rooms, hospital beds, chairs, instruments, and equipment.

Electrolysed water anolyte (DESY) is widely used in healthcare facilities in a variety of settings. The applications are as follows:

- A) **Hospital Sanitation**-DESY obtained from AQUECA W40 can be used to sanitize all contact surfaces in the hospital including patient rooms, hospital beds, chairs, medical equipment and instruments, nursing stations, surgery rooms, floors, and bathrooms.

Electrolyzed water is:-

- 100 times more biocidal than chlorine bleach
- Effective against G+ and G- bacteria
- Effective against Clostridium difficile spores
- Effective against VRE, MRSA, and MRSE
- Effective against Mycobacterium tuberculosis
- Effective against HIV, HBV, HCV, and CMV
- No high temperatures are necessary
- Most effective between 50-86 °F (10-30 °C)
- Does not cause irritation, safe on eyes and skin

B) Other applications

1. Surface sterilization
2. Disinfecting tonometer heads
3. Spot-disinfection of countertops and floors.
4. Tuberculocidal disinfectant
5. Decontaminating blood spills (i.e., drops of blood)
6. Irrigating agent in endodontic treatment
7. Disinfectant for manikins
8. Laundry
9. Dental appliances
10. Hydrotherapy tanks
11. Regulated medical waste before disposal
12. Water distribution system in hemodialysis centers and hemodialysis machines.