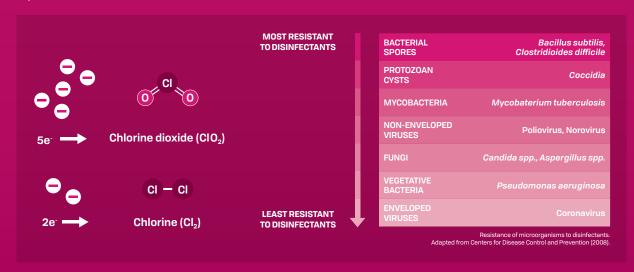


Chlorine dioxide is an oxidizer. Oxidizers work by stealing electrons from nearby microorganisms, which damages their cell walls and ultimately destroys them. This mode of action means **microorganisms cannot build resistance to chlorine dioxide**, even with persistent use.

Chlorine dioxide (CIO<sub>2</sub>) is very different to Chlorine (CI). CIO<sub>2</sub> has a low oxidation potential, meaning it can steal electrons from passing microorganisms without producing unwanted by-products. A low oxidation potential is also what gives CIO<sub>2</sub> a **better material compatibility**, making it ideal for frequent use on surfaces.

When it comes to oxidation capacity,  $CIO_2$  is one of the best. Oxidation capacity refers to the number of electrons one  $CIO_2$  molecule can obtain from other microorganisms around it.  $CIO_2$  has a capacity for 5 electrons, whereas  $CI_2$  has a capacity for just 2, less than half.

This means ClO<sub>2</sub> works over twice as efficiently as Cl<sub>2</sub>, and that the concentration of ClO<sub>2</sub> can be far lower even when dealing with bacterial spores such as *C. difficile*.



Chlorine dioxide is the chemistry at the very heart of Cache.

Delivering **powerful surface disinfection** without compromising on compatibility, safety, or ease of use.



