Chlorination

 $Cl_2(aq) + H_2O(l) \rightleftharpoons H^+(aq) + Cl^-(aq) + HClO(aq)$

Dichlorine reacts with water to form hypochlorous acid, which disrupts bacterial cell walls and denatures necessary enzymes and structures needed for bacterial

The Farris Center Pool (UCA). Dichlorine or other chlorine-based compounds are used to destroy microorganisms in swimming pools. The process of adding chlorine to disinfect water is called chlorination.

growth.

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$HCIO(aq) + Sunlight \rightarrow HCI(aq) + \frac{1}{2}O_2(g)$



Hypochlorous acid decomposes in bright light (such as sunlight) and at high temperatures, so chlorine needs to be periodically added to pools, fountains, and other water sources that rely on chlorination to disinfect the water.

