





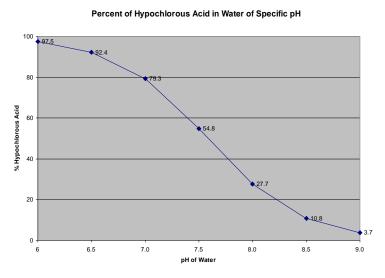
Mionix has developed FreshFlo  $100^{\text{(}}$  (FreshFlo) a low pH product used as an acid activator for Chloride Dioxide. FreshFlo is a proprietary product resulting from the blending of FDA approved Generally Recognized As Safe (GRAS) ingredients.

## Advantages of Using FreshFlo as an Acid Activator for Chlorine Dioxide

- Marketed as a concentrate
  - Economical to use
- Reduced transportation and labor costs
- Ready-To-Use No mixing required, no mixing errors
- No noxious odor
- No off-putting taste when added to water

## Why should You use FreshFlo as an acid activator for Chlorine Management?

- The key to effective chlorine use is pH management.
- Chlorine dioxide concentrate, is a mixture of chlorine dioxide (CIO<sub>2</sub>) and sodium hypochlorite (NaOCI).
- The chlorinated compounds both disinfect through oxidation. However, both are functionally pH dependent. Under alkaline conditions (pH>7.0) CIO2 breaks down to non-functional chlorite and chlorate, whereas sodium hypochlorite dissociates into non-functional sodium and hypchlorite ions.
- The functional entity in chlorine treated water is hypochlorous acid (HOCI).
- Formation of hypochlorous acid is dependent on pH.
- FreshFlo, when added to chlorine treated water lowers the pH and drives up the concentration of hypochlorous acid.
- As seen in the chart below approximately 28% of hypochlorous ion exists in the HOCI form in water having a pH of 8.0, whereas, approximately 92% of the hypochlorous ion exists as HOCI at a pH of 6.5. Thus, the antimicrobial effectiveness of the chemically treated water is significantly increased.





To purchase, please contact: **MWI (800) 824-3703** For additional technical information, please contact:

> Dr. Maurice Kemp (361) 445-1136 mkemp@mionix.com