# Use of Chlorine in Food and Beverage

# Industries

Best use chlorine for better sanitation in factories. Learn how to save money and improve efficiency by maintaining different levels in different situations.



## Measuring Chlorine

WaterWorks Free Ultra High Chlorine Test Kit, Part No: 480024, measures the "free available Chlorine" in the process. The Kit is easy to use within 1 minute for the chlorine solution The higher accuracy of professional test kits also means that the tests conform to audit standards.

Recommended Free chlorine in food and beverages industries ranges 75 ppm to 200 ppm





Part No. 480024 Detects Free Chlorine: 0, 25, 50, 100, 200, 300, 400, 500, 750 ppm (mg/L)

Bottle of 50 tests

#### WaterWorks™ Free Chlorine Ultra High

### pH and Chlorine

pH also needs to be monitored, as it has a great effect on chlorine. Between pH 6.5 and 7.0, free chlorine is 80 – 95% available. At pH greater than 8, the free chlorine concentration is less than 20%.

As part of a Quality Assurance Programme, it is important to remember to READ, RECORD and REACTED

#### 1. Concentration

- High concentrations increase the effectiveness.
- A concentration of 50 200 ppm is recommended for some common usage, such as disinfection of food contact surfaces.
- If you are using a solution stronger than 200 ppm, rinse the surface with clean water after a few minutes of application.
- High concentrations are not recommended as they can cause an undesirable taste, ill-health, corrosion and even explosions.

#### 2. Contact Time

- Longer exposure time increases the effectiveness.
- Contact times of one to five minutes are usually sufficient to achieve a thorough sanitization, depending on the above factors.
- Do not let the chlorine solution stay in contact with equipment for more than 30 minutes or it could corrode