



## Chemical Sanitizing

	Chlorine Bleach	Iodine	Quaternary Ammonium (Quats)
<b>Minimum concentration</b> ---for immersion  ----for spray, wiping cloths or cleaning in place	50 ppm✦  100 ppm△	12.5 ppm  25 ppm	200 ppm  400 ppm
<b>Temperature of solution</b>	75 °F – 115 °F	75 °F – 120 °F	Above 75 °F
<b>Time for sanitizing</b> ---for immersion  ---for spray, wiping cloths or cleaning in place	1 minute  follow manufacturers instructions	1 minute  follow manufacturers instructions	1 minute, however some products require longer contact time; read label
<b>pH (detergent residue raises pH of solution so rinse thoroughly first)</b>	Must be below pH 8	Must be below pH 5.0	Most effective around pH 7 but varies with compound
<b>Corrosiveness</b>	Corrosive to some surfaces such as metals	Noncorrosive	Noncorrosive
<b>Response to organic contamination in water</b>	Quickly inactivated	Made less effective	Not easily affected
<b>Response to hard water</b>	Not Affected	Not Affected	Some compounds inactivated - read label. Hardness over 500 ppm is undesirable for some quats
<b>Indication of strength of solution</b>	Test kit required	Amber color indicates presence. Use test kit to determine concentration	Test kit required. Follow label instructions closely

- ✦ 1/2 tsp. of 5.25% sodium hypochlorite (chlorine bleach)
- △ 1 tsp. of 5.25% sodium hypochlorite (chlorine bleach)
- ✦ 1/4 tsp. of 6.0% sodium hypochlorite (chlorine bleach)
- △ 1/2 tsp. of 6.0% sodium hypochlorite (chlorine bleach)

- in 1 gallon water = 50 ppm
- in 1 gallon water = 100 ppm
- in 1 gallon water = 50 ppm
- in 1 gallon water = 100 ppm

- 1/2oz (2 tsp. or 1capful) of 5.25% sodium hypochlorite (chlorine bleach)
- 1 tsp. of 6.0% sodium hypochlorite chlorine bleach)

- in 1 gallon water = 200 ppm
- in 1 gallon water = 200 ppm

ppm = parts per million