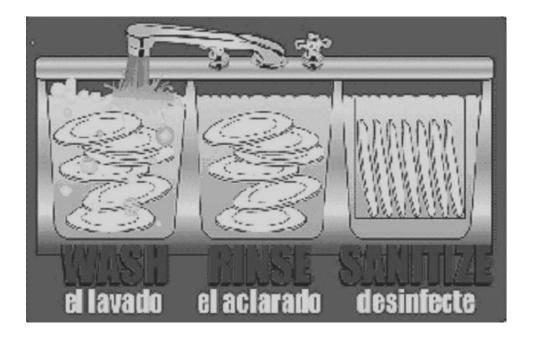
Manual Warewashing of Equipment & Utensils Chemical Sanitation, Temperature, pH, Concentration & Hardness

A chlorine solution shall have a minimum temperature based on the concentration and pH of the solution as listed in the following chart:

An iodine solution shall have a minimum temperature of seventy-five (75) °F and a pH of five (5.0) or a pH no higher than the level for which the manufacturer specifies the solution is effective and concentration between twelve and one-half ppm (12.5) and twenty-five (25) ppm.

Minimum Concentration	Minimum	Temperature	Times
ppm	pH 10 or less °F	pH 8 or less °F	
25	120	120	10 seconds
50	100	75	7 seconds
100	55	55	3 seconds



A quaternary ammonium shall have a minimum temperature of seventy-five (75) °F and have a concentration as indicated by the manufacturer's directions and be used in water with five hundred (500) ppm hardness or less in water having a hardness no greater than specified on the label.

If necessary for effective cleaning, utensils and equipment should be preflushed, presoaked or scrubbed with abrasives. After cleaning and sanitizing, the equipment and utensils shall be air-dried or used after adequate draining. Equipment and utensils may not be cloth dried except that utensils that have been air-dried may be polished with cloths that are maintained clean dry.

