

99 Equipment Spec Sheet

DRAFT 6/4/99

CLEANING FREQUENCY: Equipment food-contact surfaces & utensils shall be cleaned & sanitized each time there is a change from working with raw animal foods to RTE foods or between uses with raw fruits & vegetables and with PHF; before using or storing food TMD's; any time when contamination may have occurred; and before each use with different type of raw animal food, *except in contact with a succession of different raw animal foods each requiring a higher cooking temperature as specified under 3-401.11 than the previous food, such as raw fish followed by cutting/preparation of raw poultry.*

Preparation Room Temperature		Cleaning Frequency
41°F or less	5.0°C or less	24 hours
> 41°F to 45°F	> 5.0°C to 7.2°C	20 hours
> 45°F to 50°F	> 7.2°C to 10.0°C	16 hours
> 50°F to 55°F	> 10.0°C to 12.8°C	10 hours
> 55°F unrefrigerated rooms	> 12.8°C	4 hours

Refrigerated room temperatures & cleaning frequency to be documented.

PHF's, Food Contact Surfaces:

1. In storage, containers of PHF maintained at Chapter 3 temperatures/date markings are cleaned when emptied.
2. Containers in serving situations such as salad bars that are maintained and refilled with PHF's at Chapter 3 temperatures, are cleaned at least every 24 hours.
3. In-use utensils intermittently stored in a container of hot water at ≥140°F are cleaned every 24 hours or more frequently to preclude accumulation of soil residues.

NON-PHF's, Food Contact Surfaces:

1. Utensils & equipment at any time when contamination may have occurred.
2. At least every 24 hours for iced tea dispensers and consumer self-service utensils
3. Before restocking consumer self-service equipment & utensils
4. In or enclosed components of equipment such as ice bins, ice makers, beverage nozzles & syrup dispensing lines/tubes, cooking oil storage tanks & distribution lines, coffee bean grinders, and water vending equipment: as specified by the manufacturer or as necessary to preclude accumulation of soil or mold.

SANITIZATION: CONCENTRATION, pH, TEMPERATURE, HARDNESS & CONTACT TIME

Minimum Concentrations ppm or mg/L	pH ≤ 10.0 & Minimum Temperature	pH ≤ 8.0 & Minimum Temperature	Contact Time
Chlorine 25	120°F (49°C)	120°F (49°C)	≥ 10 seconds
Chlorine 50	100°F (38°C)	75°F (24°C)	≥ 7 seconds
Chlorine 100	55°F (13°C)	55°F (13°C)	≥ 10 seconds
Iodine ≥ 12.5 to 25	pH ≤ 5.0 or per label; ≥ 75°F (24°C)		≥ 30 seconds
Quaternary Ammonium, per label	water hardness ≤ 500 ppm or mg/L or per label; ≥ 75°F (24°C)		
Hot Water Sanitize, 3 compartment sink w/ integral heating device	≥ 171°F (77°C) immersed in rack or basket		

NOTE: All chemical sanitizers shall be listed in 21 CFR 178.1010 Sanitizing Solutions and used in accordance with the EPA-approved manufacturer's label use instructions.

WAREWASHING: MECHANICAL & MANUAL		Minimum Wash Temperature	Minimum Sanitizing Temperature
SPRAY TYPE WAREWASHERS: Single Tank, Hot Water Sanitize	Stationary rack, single temperature	165°F (74°C)	165°F (74°C) 180°F (82°C)
	Stationary rack, dual temperature	150°F (66°C)	
	Conveyor, dual temperature	160°F (71°C)	
Multitank, Hot Water Sanitize	Conveyor, multi temperature	150°F (66°C)	
Chemical Sanitize	Any warewashing machine	120°F (49°C)	sanitization levels as stated in the above table or per labeled manufacturer's instructions on the container.
3 Compartment Sink	Cleaning agent labeling may permit lower washing temperatures	110°F (43°C)	

MECHANICAL WAREWASHING:

1. As appropriate, washing, rinsing & sanitizing temperatures; fresh water sanitizing rinse pressure; conveyor speed or cycle time shall be in accordance with dish machine "data plate" and manufacturer's instructions.
2. Fresh hot water sanitization: the flow pressure immediately downstream or upstream of the sanitization rinse control valve shall be 15 psi to 25 psi (100 to 170 kilopascals), and any pressure measuring devices shall be scaled at increments of at least 1 psi or 7 kilopascals, and accurate to ± 2 psi or ± 14 kilopascals within the working pressure range. Hot water entering the manifold for sanitizing may not be more than 194°F (90°C) {*except for hand-held spraying devices for in-place cleaning & sanitizing*}. Utensil surface temperatures must reach at least 160°F (71°C) as measured by an irreversible registering temperature indicator.
3. Chemical sanitization: units installed after the adoption of this code shall be equipped with an audible or visual "low level" sanitizer indicator to add more sanitizer.

FOOD-CONTACT SURFACE LIMITATIONS:

GALVANIZED METAL: May not be used in contact with acidic food.

CAST IRON: May be used as a cooking surface or serving utensils only as part of an uninterrupted process from cooking through service.

COPPER & COPPER ALLOYS (BRASS): May not be used for foods with a pH < 6.0 such as vinegar, fruit juice, wine, etc., {except for the pre-fermentation & fermentation steps of a beer brewing operation} or for a water supply line between a soda carbonator & backflow preventer.

WOOD: Wood & wood wicker may not be used as a food-contact surface.

Except:

1. Hard maple or equivalently hard, close-grained wood may be used for cutting boards & blocks, bakers' tables, and utensils such as rolling pins, doughnut dowels, salad bowls & chopsticks;
2. Wooden paddles for pressure scraping kettles in confectionery operations with products reaching at least 230°F (110°C).
3. Whole uncut raw fruit & vegetables, and unshelled nuts may be kept in the original wooden shipping container.
4. Whole, uncut, raw foods requiring the removal of rinds, peels, husks, or shells may be kept in untreated wood containers or treated wood as specified in 21 CFR 178.3800 Preservatives for Wood.

NONSTICK COATINGS: Cooking surfaces that have a perfluorocarbon resin coating shall be used with nonscoring or nonscratching cleaning aids.

SPONGES: May not be used in contact with cleaned & sanitized or in-use food contact surfaces.

LEAD LIMITATIONS:

Ceramic, China & Crystal	Hot Beverage or Coffee Mugs	Maximum Lead: 0.5 ppm or mg/L
	Large Hollowware, bowls ≥ 1.16 qts or 1.1 L	1.0 ppm or mg/L
	Small Hollowware, bowls < 1.16 qts or 1.1 L	2.0 ppm or mg/L
	Flat Utensils, plates & saucers etc.	3.0 ppm or mg/L
Pewter Alloys used as a food contact surface		.05%
Solder & Flux used as a food contact surface		.2%

TEMPERATURE MEASURING DEVICES - TMD's

1. Designed to be easily readable.
2. Food TMD's shall be provided & readily accessible for ensuring attainment & maintenance of food temperatures as specified under Chapter 3.
3. Food TMD's may not have sensors or stems constructed of glass, *except stems encased in a shatterproof coating such as candy thermometers may be used.*
4. Mechanically refrigerated or hot food storage units: equipped with at least one integral or permanently affixed, easily viewed TMD with sensors shall be located in the warmest part of the refrigeration unit and in the coolest part of a hot storage unit. *Except where a TMD is not practical for measuring ambient air surrounding the food, such as heat lamps, cold plates, steam tables, salad bars and insulated food transport containers.*
5. Warewashing machine TMD's to indicate water temperature in each wash and rinse tank; and entering the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.

TMD Accuracy	Food	Ambient Air & Water
Fahrenheit & Celsius, or Celsius only	± 1°C	± 1.5°C
Fahrenheit Only	± 2°F	± 3°F

Food or warewashing TMD=s shall have a numerical scale, printed record or digital readout: increments are to be no greater than 2°F (1°C) in the intended range of use.