UW Medicine - Pathology

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Glassware Cleaning Procedure

Adopted Date: 08/02/11 Revision Date:

PURPOSE

To ensure the cleanliness of laboratory glassware and equipment by cleaning and handling in an appropriate manner that ensures contaminate-free materials.

SCOPE

For all staff that use and clean laboratory glassware.

PROCEDURE

There are three methods in the department for washing glassware. Please determine what method is utilized in specific laboratories and follow the procedure(s) listed below:

Materials:

Tap Water
Distilled Water
Cleaning Brush
Detergent
Ethanol - for water insoluble solutions
Bleach (10%)

Routine Hand Washing of Glassware:

1. **Pre-Clean materials:**

- a. Water soluble solutions: rinse 3-4 times with tap water.
- b. Water insoluble solutions (e.g. xylenes): rinse 2-3 times with ethanol and discard appropriately, then rinse 3-4 times with tap water.
- c. Weak acids (e.g. 0.1M and 1M HCl): rinse 3-4 times with tap water.
- d. Weak bases (e.g. 0.1M and 1M NaOH): rinse thoroughly with tap water to remove the base.
 - i. Both strong acids and bases must be rinsed with copious amounts of tap water in well ventilated area prior to placing in the general wash area.
- e. All other glassware not covered above (excluding Silver Nitrate see below) must be rinsed thoroughly with tap water and scrubbed. Leave glassware to soak for a minimum of 1 hour in 10% bleach solution prior to placing in a dishwasher or sink.

2. **Hand Washing:**

- a. Once pre-washed, using a detergent scrub the glassware with a brush.
- b. Rinse the glassware well with tap water to remove the detergent.
- c. Using distilled water, thoroughly rinse the glassware inside and out.
- d. Place glassware on drying racks to dry.

3. Acid Wash for Silver Nitrate Coated Glassware

- a. Soak glassware in strong bleach solution 1 hr or overnight.
- b. Wash glassware with a combination of Labtone and bleach.

- c. Rinse the glassware in running hot water.
- d. After rinsing glassware, acid wash in 1% Hydrochloric acid solution.
- e. Rinse again with hot running water.
- f. Stack glassware and dry overnight. When glassware is dry, place in drawers and cabinets to avoid getting dusty.

Washing of Glassware by Microbiology:

Deliver glassware nightly to Laboratory Medicine Microbiology for washing. Laboratory personnel follow appropriate procedures to ensure proper washing. Glassware is retrieved in the morning prior to the beginning of work.

Dishwasher Washing of Glassware:

For laboratories who operate the Lancer 810-815-LX dishwasher.

- 1. Loading the Dishwasher:
 - a. Glass and plastic Coplin jars, glass boats, small beakers, and small Erlenmeyer flasks are loaded on the top rack.
 - b. Large beakers and Erlenmeyer flasks go on the bottom rack along with graduated cylinders and plastic boats.

2. Starting the dishwasher

- a. Choose the washing cycle number 2.
- b. Push the start button
- c. If the machine is ready to run, the following will appear on the display screen:
 - The selected cycle number
 - The temperature in the chamber
 - The current function: "PREWASH 2"

Solutions Used In the Dishwasher:

Non-foaming detergent

Neutralizing Acid: Acetic Acid diluted with 75% water

Daily, a random check of glassware is to be performed and recorded to test for residual detergent by using phenolphthalein. Clean glassware will not change colors. If the test solution turns colored (pink/blue) the glassware has residual detergent and needs to be rinsed more thoroughly.

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