

<b>Glassware/Plastic Washing</b>	<b>Identifier:</b> CSP-0005
	<b>Revision:</b> 0
	<b>Page:</b> 1 of 3

ISU Chemistry Department	Stockroom Procedure	Effective Date: 05/01/2020
--------------------------	---------------------	----------------------------

## 1. INTRODUCTION

This procedure provides guidance in washing glass and plastic laboratory supplies in the ISU Chemistry Stockroom.

## 2. PRECAUTIONS AND LIMITATIONS

- 2.1. Always use caution when working with razor blades.
- 2.2. Always use proper personal protective equipment (PPE) when working with strong detergents or acids.

## 3. APPARATUS AND MATERIALS

- 3.1. Drying racks
- 3.2. Glassware brushes, various sizes
- 3.3. Paper towels
- 3.4. Razor blades
- 3.5. Wash bottles

## 4. REAGENTS

- 4.1. Versa Clean
- 4.2. Alconox
- 4.3. Deionized water
- 4.4. Acetone
- 4.5. NoChromix
- 4.6. Baking soda
- 4.7. Nitric acid
- 4.8. Hydrochloric acid
- 4.9. Sulfuric acid

## 5. INSTRUCTIONS

- 5.1. Removing Sharpie labels
  - 5.1.1. Wipe off with an acetone dampened paper towel.
  - 5.1.2. Scrub off with a green scrubber.
- 5.2. Removing paper labels
  - 5.2.1. Remove the clear tape over the printed label using a razor blade.



<b>Glassware/Plastic Washing</b>	<b>Identifier:</b> CSP-0005
	<b>Revision:</b> 0
	<b>Page:</b> 2 of 3

ISU Chemistry Department	Stockroom Procedure	Effective Date: 05/01/2020
--------------------------	---------------------	----------------------------

- 5.2.2. Place the item in a tub 2/3 full of Alconox solution prepared with deionized water.
- 5.2.3. Soak overnight.
- 5.2.4. Remove labels.
- 5.2.5. Discard soap solution.

### 5.3. Cleaning Glassware/Plastic

- 5.3.1. Wash in hot water with Versa Clean or Alconox soap using a green scrubber or brush inside and out.
- 5.3.2. Rinse with deionized water at least 4 times or until any sign of bubbles is gone.
- 5.3.3. Place on rack to dry.

### 5.4. Cleaning Burettes

- 5.4.1. Add 3-5mL of Versa Clean soap to the burette with stopcock closed.
- 5.4.2. Add deionized water until burette is approximately half full.
- 5.4.3. Use a burette brush to scrub the interior of the burette.
- 5.4.4. Open stopcock and allow soap solution to flow through stopcock.
- 5.4.5. Loosen the stopcock nut so the stopcock is able to move laterally (side to side).
- 5.4.6. Rinse burette completely with deionized water at least 4 times or until any sign of bubbles is gone.
- 5.4.7. Tighten stopcock nut.
- 5.4.8. Position the stopcock in the open position.
- 5.4.9. Hang the burette to dry on a drying rack.

**NOTE:** *If the burette tip is clogged, use an iron wire to clean the tip by inserting the wire into the end of the burette to dislodge the block. Pour the rinse and clog out the open end of the burette, not the tip.*

### 5.5. Cleaning pipettes

- 5.5.1. Fully immerse pipettes in the pipette dump with the tip pointing up.
- 5.5.2. Let the pipettes soak overnight.
- 5.5.3. Rinse with deionized water at least 4 times or until any sign of bubbles is gone.
- 5.5.4. Place tip up to dry on a drying rack.



<b>Glassware/Plastic Washing</b>	<b>Identifier:</b> CSP-0005
	<b>Revision:</b> 0
	<b>Page:</b> 3 of 3

ISU Chemistry Department	Stockroom Procedure	Effective Date: 05/01/2020
--------------------------	---------------------	----------------------------

5.6. Cleaning glassware analytically with acid

5.6.1. Clean the glassware using 8M nitric acid or NoChromix solution.

5.6.2. Neutralize the remnants of the nitric acid or NoChromix on the glassware by rinsing with a 5% baking soda solution.

5.6.3. Rinse the glassware 4 times with deionized water.

5.6.4. Inspect for any water droplets left on the interior.

5.6.4.1. If water droplets are left repeat steps 5.6.1 to 5.6.3 until completely clean.