



## **SYLVIE GERMAIN-COVEY**

### Etching Supplies List

**Most of the following supplies may be purchased at the League's art supply store, located in the lobby. It is advisable to speak with the instructor before buying supplies.**

#### **BASIC MATERIALS FOR ETCHING:**

Copper plate  
Etching needle, scrapper, burnisher  
Universal hard ground and soft ground  
Liquid asphaltum  
Different paint brushes, for small details and wide coating  
Etching inks, tubes and cans (black first, then colors)  
Tarlatan  
News print pad  
Printing paper: Rives BFK white or Arches Cover  
Masking tape

#### **To be purchased at Duane Reade across the street:**

Kitchen gloves  
Paper towels  
Rubbing alcohol

#### **To be purchased in a hardware store:**

Waterproof sandpaper #450 and #600  
Metal file  
Foam brushes, 2" wide  
Contact paper (used in kitchen) for coating the back of copper plates. Use the brand CONTACT only.

Advanced students should talk to the instructor for more supplies and tools

#### **MATERIALS FOR SAFE PHOTO ETCHING:**

All of the above plus:

A positive halftone, black and white image on acetate.  
(It can be Xerox, computer laser print or digital halftone on acetate or lith film with halftone screen 85l.dot)

**Please talk to the instructor first!**



# The Art Students League of New York

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## POLYMER SAFE PHOTO-ETCHING

### **MATERIALS:**

Positive black and white image Xeroxed on acetate or digital laser halftone acetate or positive photolith film halftone, 85 l.dot per square inch

Copper plate for etching, Contact paper to protect the back of the plate

Metal file, emery sand paper #450

Polymer photo etching film (Zacryl, Imagon), soda ash

Newsprint paper pad, masking tape, scissors

Printing supplies for normal etching: printing paper such as Rives BFK or Arches Cover, Etching black ink, ink knives, tarlatan

### **PROCEDURE:**

#### **Prepare the plate:**

1. File the edges of a copper plate at 45 degree angle; cover the back with Contact paper.
2. Lightly sand the plate with emery paper #450
3. Degrease the plate with cleanser, wipe with denatured alcohol

#### **Lamination:**

4. In the darkroom, bring your clean plate taped from the bottom on a piece of newsprint along with your maskingtape, scissors, the positive halftone, extra newsprint paper and the polymer photo emulsion.
5. Under safe light, cut emulsion film from roll, slightly larger than the plate size. Immediately protect the roll of film with black wrapping to safeguard from light.
6. Use a piece of masking tape to peel off the frosty side of film emulsion (glossy layer stays on for now).
7. Place the polymer film, emulsion side down; over the plate (emulsion is blue).
8. Press from center of the plate to the edges to eliminate air bubbles and wrinkles.
9. Run the plate protected under paper through the etching press to secure emulsion.

#### **Exposure:**

10. Expose the plate with the positive image on acetate with the light exposure unit set for about 3 min. or 150 light units (it is necessary to test light source to determine the exact time of exposure). Peel off the glossy plastic from the blue emulsion.
11. Trim the edges of paper and excess emulsion all around the plate with scissors, remove newsprint from bottom of the plate.

#### **Developing**

12. Mix one ounce of soda ash for one gallon of warm water. Place plate in a clean tray and pour developing solution over. Gently rock the tray and touch the plate to feel the texture of the emulsion developing. Rinse with water after twenty seconds, quickly pat the plate dry with clean newsprint, air dry the plate.
13. When the emulsion is dry and harden, ink the plate with etching ink, wipe and proof it.

If necessary it is possible to continue developing the plate in stages to achieve all ranges of tones. When the plate is finished, expose it to daylight to harden it.

**DO NOT USE ALCOHOL OR WATER ON A FINISHED PLATE.** Alcohol will dissolve the Riston film and destroy it. Water will create stains.



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## **HOW TO MAKE HALFTONE POSITIVE FOR PHOTO ETCHING**

From Adobe PhotoShop, using a Macintosh computer, UMAX scanner and Hewlett Packard 5000 Laser Jet Printer.

### **SCANNING THE IMAGE**

1. Start the computer and open the hard drive.
2. Open Adobe Photoshop
3. Turn on the scanner. Sometimes a scanner needs to be turned on before the computer.
4. Place the photograph in the scanner
5. Click the mouse button and hold on "file" and scroll down to "import". Highlight "UMAX Majiscan" (or the name of your scanner) and release the mouse button to open the scanner software.
6. Using the "scanner controls", follow the steps below.
  - A. Set the scanner to "flatbed (reflective)".
  - B. Set to "gray".
  - C. Set to "300 or 400 dpi or dots per square inch".
  - D. Set at "100%".
7. Click the "preview" button on the control panel.
8. When the image appears in the window, move the marquee to fit the edges of the image. Use the mouse to click and hold on a corner and drag the marquee to the edge of the image.
9. Once the marquee is where it belongs, click the "scan" button on the control panel.
10. The image will open as an Adobe PhotoShop file and appear on the screen.

### **MAKING A PERFECT HALFTONE FOR PHOTO ETCHING**

1. Make a copy file of the image. Set the image resolution to 300 dpi.
2. Select from pull down menus: Image, then Mode: change to Bitmap.
3. Change the bitmap dialogue box options: Output value to 300 to match your image resolution.
4. At the bottom, select **Halftone Screen**.
5. Change values as follow:  
**Frequency: 85 dpi**  
**Angle: 33**  
**Shape: round**

The image will then be screened with this halftone. If it is too dense, then undo the changes or make another file copy from the source image and make some adjustments to the Output value.

6. Print the halftone image on laser acetate and bring this to class. (You need access to a **laser printer**, Inkjet does not work for this process).