

### **Chemicals and Equipment use**

#### **Simple Green**- ½ simple green + ½ water in spray bottle

It is used to clean the ink from the screen

Spray directly on the screen away from your face

Scrub gently, more soft scrubbing than water, use less water

Work on both sides of screen

\*Do not scrub aggressively on the back of the screen where the design was applied, it may come off with too much scrubbing

#### **Bon Ami powdered Cleanser** – it has no chlorine bleach so it is safer to use than other cleansers

It is used to degrease the screen the 1<sup>st</sup> time new mesh is stretched

It also helps to get rid of ink stains left on the screen after power spraying

Wet screen on both sides, use a very small amount of cleanser and gently scrub the surface to take out any oils or inks on the screen.

Rinse both sides well with water.

#### **Photo Emulsion** – I use ProChem® WR-3 Water Resist Emulsion, Chemical Consultants, Inc.

Which is used with concentrated textile pigments, no solvents are involved, and has a high resistance to water

\*light sensitive so keep it in the dark room

always replace lid tightly

wear disposable gloves

do not introduce air by stirring aggressively

Apply the photo emulsion on the back side of the screen, bottom to top direction with one smooth pass.

\*apply a very thin coat, with no holes of light showing

allow to dry to touch, usually 20 minutes, has the appearance of being shiny

dry in the stand under the light table, turn on fan for faster drying time

It is okay to have the door open as the light is diffused and will not interfere with the emulsion

Store screen afterwards in the white box, it is black and protected from the light, make sure your name faces upward for easy identification

\*Never let emulsion sit on equipment, it's nearly impossible to take off, clean with simple green

#### **Extender Base** – AQ51 Water based transparent extender, it comes in quarts, gallons and 5 gallon containers

It is used to mix concentrated inks for screen printing on textiles and also paper.

It is possible to buy premixed ink ready for printing but they cost more in the long run.

Use newspaper, spatula or a measuring cup, paper towels for clean up.

Do not put extender down the sink!

Replace ink used in printing back in ink container.

#### **Textile Inks**- there are many brands, I buy the ones from Rheetech in Los Angeles (supply list)

They are concentrated and need to be mixed with an extender base.

You can make any color by mixing them in different proportions, by the dropful.

The more ink you use the more opaque they are.

Do not get these on your skin or clothes as they stain significantly.

Wear disposable gloves when mixing inks.

**To use** – use a spatula or a measuring cup and fill a small plastic (we have pint size) container with 1 Cup or slightly more with the water based extender from the large bucket.

Carefully squeeze small drops of ink into the extender, mix well to incorporate ink, a small drop goes along way.

If you are not satisfied with a mixed color try adding another colored ink to it, or fill another container with some extender and add part of the mixed ink to it + other ink. Ask someone in class to trade with you.

These must be airtight otherwise they will spoil and become rancid.

Make sure the lid is on tightly. These can be stored and remixed with other colors and can last up to several months. Use Simple Green to remove inks from screens.

Clean up – never put extender base down the sink, it will act like an acrylic paint when dried.

**Mineral Oil or baby oil** – used for creating a stencil for screen printing with photo emulsion

Use a black and white photocopy, or a design drawn with a black sharpie marker

Use a glass plate, (located in the dark room) Place design face down on glass,

Apply a generous spoonful of mineral oil to back of paper and gently rub it all over with a tissue,

Not paper towel as that tends to absorb too much of the mineral oil

Saturate the paper until it appears transparent, mop up excess oil in between newspaper

Let it dry thoroughly before you set it on the screen and exposure unit

**Photo Emulsion Remover/Screen Reclaimer** – ER/35 Emulsion Remover concentrate (gal)

there are many brands of emulsion remover. I use a concentrate that is mixed into a larger container with water. 1 part concentrate remover + 9 parts water.

I fill the labeled spray bottles with this solution.

\*Never let the photo emulsion remover sit in direct sunlight or sit on the screen for more than 2 minutes.

What that will do is make the photo emulsion permanent and you won't be able to reclaim the screen!

To use- (make sure ink is removed from screen first)

Use in a well-ventilated area and spray away from face,

use gloves or a scrubber with a handle

Wet both sides of the screen with water

Apply the remover to both sides

Let it sit for less than 2 minutes to give it some time to dissolve the photo emulsion

Sometimes I will also use one of the bluepad scrubbers with handle to help

Use the **Power Washer** to remove the photo emulsion going back and forth if necessary on both sides.

**Power Washer Unit-** kept in the lab, down hall next to patio, Students are allowed to use the power washer during class. (when ready to clean screens of photo emulsion)

Instructions: (located on the machine) attach short garden hose to the lower side valve on the power washer, turn on water faucet, let water run approx. 30 seconds, plug power washer into electrical outlet located behind the washout sink. Pull trigger on the power washer gun and allow water to run for 30 seconds, while the trigger is pulled step on the ON pedal of the power washer to engage or operate. The gun is faced into the sink and sprayed closely to the screen. When finished cleaning screens, release gun trigger, step on the OFF pedal to stop the machine. Turn off water at the faucet. Pull the gun trigger to drain the gun of water (this step is very important to maintain the machine), Replace the hose back on the machine. (the hose winds up like a lasso). Detach the short hose from the Power Washer. Put the machine back into the lab.

I am researching Haze Removers that are less toxic to use