North Carolina School of the Arts
Dye Room Procedures
Costume shop

General Dye room Procedures:

Always wear nitrile or trilite gloves whenever handling dye, paint synthrapol, milisoft or any chemical agents. These gloves are good for 2 to 3 hours of continuous use. If you remove soiled gloves, discard them. Never reapply contaminated gloves.

Absolutely no open containers of food or beverages are allowed in the dye room, since there could be a possibility of ingesting airborne particles.

Place all tools, measuring cups, dye pots, etc. in warm soapy water bath as soon as you are finished using them. This will help control airborne particles. Anything that dye has come in contact with should be scrubbed clean and rinsed thoroughly. Keep up with your dishes as you work; don’t let them pile up. It’s important to clean up after yourself as you go, since there are several of us working in a small space – we need to share tools and space with consideration.

Daily Cleaning:

Wash all dye towels and aprons at the end of the day. Put them in the dryer first thing in the morning, so they’ll be ready for the work day.

Weekly (Or More Frequent) Cleaning:

Wipe down all surfaces with a 10% bleach solution (dye room counters, washer, dryer, laundry area). Include the INSIDES of washers and dryers.

DYE Processes:

We are responsible for all color and texture of fabrics and costumes. This may involve:

  Tinting
  Special washing or drying treatments (such as primitive pleating or felting)
  Vat (immersion) dyeing
  Surface embellishment (painting, stenciling, silk screening, block printing)

Always be sensitive to what the drapers will be working with after it leaves the dye room. Don’t overload the washer and dryer. Untwist and untangle yardage or garments BEFORE they go in the dryer, so they will get less wrinkled. Check the dryer several times through the drying cycle, to make sure things have not gotten tangled, and to verify that things are not shrinking.
Developing Color or Dye Treatments:

Always produce samples prior to dyeing yardage or costume pieces. It is important to be precise and exact, so that your results are repeatable. Keep accurate formulas, with swatches, for the entire build. (Organized by show).

Sometimes we are called upon to dye additional yardage, or to match a dyed item after some time has passed. You will forget what you have done if you don’t write it down carefully!

Check your color in natural light (outside or in one of the fitting rooms).

The approval process for samples and dyed items is:

1. Craft Head
2. Designer AND / OR

Dye Storage:

Dyes are stored in sections, by dye type. Keep them in those groups. We use:
RIT (union dye)
   This is stocked in shop

Other dyes may be:
Aljo Direct (cotton / rayon)
Aljo Acid (silk / wool)
Aljo Acetate / Nylon
Aljo Cold Process

Various Textile pigments, distressing agents, fiber reactive dyes, etc.

General Dye shop Respiratory Protection:

We have several systems that provide physical protection:

Vent hood over dye vat for removing dye vapors
Spray booth for toxic and fume distressing
Dye box for containing dye particles
Out door drying deck for messy applications

Any hot dye mixture produces harmful vapors. SO:

Always use the hood over the dye vats
Wear your respirator over the dye pot on the hot plate.
Keep any hot dye pot covered and on the hot plate until it has cooled completely, before you dispose of the dye down the sink.
We cannot safely protect against burned or singed dye – SO any drips or spills on the stove must be cleaned up IMMEDIATELY. Be very careful with hot plate burners. Make sure to clean the bottoms of dye pots as well.

Turn ON vent hoods at start of workday, and OFF at end of workday.

Personal Respiratory Protection:
This is your responsibility-the dye shop has some equipment but this is not for your every day use.

Whenever handling dye powders, opening dye box, working with hot dye, wear:

   Your personal respirator with organic vapor cartridges
   OR
   3M 8233 or 8577 mask (protects from nuisance levels of organic vapors)

Store any of these items in a sealed plastic bag when not in use, in order to preserve the life of the respirator.

Eye Protection:

   Wear goggles when working with dye powders or hot liquid dye.
   This is especially important for people who wear contacts.

Skin Protection:

   Wear gloves – either nitrile or trilite
   These generally last for 2 to 3 hours of use.
   Change them if they become permeated.
   Add kitchen gloves over your nitrile gloves when doing dishes.
   Add heat protective gloves over your nitrile gloves when handling very hot items (eg. When pulling hot goods out of dye vat).

Dye Life:

   Dye exhausts over time.
   Introduce dye mixture to HOT water. This will preserve the length of time the dye will stay active (and result in accurate color).
   The vat is especially slow to heat up.
   Plan ahead.
   Include vat fill time and heat up time with another task, so you can be efficient with your time.

Dye Box Daily Setup:

   Wet towels on bottom of box (to absorb dry dye particles as they settle)
   Wet wash cloth in bowl (for wiping off jars before they are restocked)
   Small glass jar with water for measuring spoons (change water frequently)
Dye Box Protocol:

- Enter the dye box with clean gloved hands
- Hold the ends of the sleeves & push through
- Make sure the cuffs are at your wrists (so your arms are covered)

- Measure out powdered dye.
- Stir thoroughly to completely hydrate the dye powder.
- Between colors, rinse spoons in water jar, so no contamination between colors occurs.
- Close all lids of dye containers.

- Exit the dye box by pulling the sleeves out with you.
- Wipe your gloved hands with the wet wash cloth.

- Remove dye containers from box. Wipe them down thoroughly with the wet wash cloth
- Bottoms too!
- Make sure lids are on securely.
- Restock dye containers on appropriate shelf.