

Chemical Resist Process

Two Methods of Working with Two Different Families of Reactive Dyes

The chemical resist process allows you to control background coloring of printing (and other methods of direct application) without the need for additional silkscreens and without color overlays. The process takes advantage of differing reactivity levels of Remazol and Cibacron F reactive dyes (similar results can be obtained with Remazol and Procion MX and Procion H reactive dyes). Since some colors of dye work more effectively with this process than others, thorough testing is necessary to achieve predictable results.

Amount of Chemical Resist

The amount of Chemical Resist that needs to be added to the Cibacron F reactive dyes is dependent upon the strength of Remazol dyes which will be applied over or under the reactive dyes (see chart).

Dye Activator Options

The chemical resist process works best with soda ash as the activator in the Cibacron F reactive dye pastes and Basilen Fixing Agent as the activator in the Remazol dye pastes. It will work with baking soda as the activator for the Remazols, but not always reliably. (With baking soda as the activator, it is critical for Remazol dyes to dry slowly; in mid-winter, it may be necessary to prolong their dampness in the fabric by batching them in plastic for 24 hours). Method One will also work with the soda soak/batching method for fixing the dyes.

Method One - Remazol Dyes Over Reactive Dyes

1. Mix Cibacron F reactive dye pastes, using the appropriate amount of Chemical Resist (depending on the strength of the Remazols you intend to use) and soda ash (unless you have soda soaked the fabric first). Refer to the chart for quantities of Chemical Resist and soda ash.
2. Apply Cibacron F reactive dyes and allow them to dry naturally. (Batch in plastic if using the soda soak/batching method of activation.)
3. Mix thick Remazol dye pastes, using the appropriate amount of dye activator (see chart).
4. Roll or squeegee Remazol dye(s) over the dry Cibacron F dyes.
5. Allow dyes to dry naturally (unless using the soda soak/batching method for fixing the dyes).
6. Unless you have used Basilen Fixing Agent as the Remazol dye activator, you must steam the fabric within 1 day of applying the Remazol dyes in order for the chemical resist process to work. That timing is not necessary with Basilen Fixing Agent as the dye activator, because it does not begin fixing the dye to the fabric until it is steamed.
7. Wrap fabric in paper, tie, and steam for 8-12 minutes.

8. Wash out excess dye and then boil the fabric for about ten minutes to achieve the full chemical resist effect. Use a drop of synthrapol in the rinse water and also in the water to be boiled.
9. The halos which occur around the Cibacron F reactive dye areas will be more or less apparent, depending on the amount of Chemical Resist used as well as on the strength and thickness of Remazol dyes you used.

Method Two - Remazol Dyes Under Reactive Dyes

1. Mix thin Remazol dye pastes with the appropriate amount of dye activator (see chart).
2. Apply Remazol dyes as desired. Allow them to dry naturally.
3. Mix Cibacron F reactive dye pastes with the appropriate amounts of Chemical Resist and soda ash (see chart).
4. Apply Cibacron F reactive dyes. Allow them to dry naturally.
5. Wrap fabric in paper, tie, and steam for 8-12 minutes.
6. Wash out excess dye and then boil the fabric for a few minutes to achieve the full chemical resist effect. Use a drop of synthrapol in the rinse water and also in the water to be boiled.
7. Little or no halo effect should occur around reactive dye areas using this method.

© patricia williams 2/02