

# DISCHARGING

*Discharging is the removal of color from fabric either as a means to change its color or as a design technique. Not all dyes may be discharged, nor may all fibers withstand the discharging agent. The discharge process contains so many variables that it is impossible to give reliable rules or recipes. The information contained here should serve only as a guide for individual experimentation. All colors will not discharge to white. This will depend entirely on the dye type and color being discharged. For example, Lanaset Yellow will discharge to white, but Lanaset Royal Blue will discharge to yellow. Also, some colors will appear to discharge in the early stages of the process, but will turn back within one value of their original color upon completion.*

## **SAFETY IN USE**

While dyes and the chemicals associated with their use are not highly toxic, they are industrial chemicals and should be handled with care. Chemical products should not be allowed to get into the eyes, but if they should by accident, wash eyes thoroughly with clean water and then obtain medical treatment. Prolonged or repeated contact with the skin should be avoided. Wear rubber gloves and use implements to stir solutions and dyebaths. Avoid inhalation of fumes by wearing a good respirator.

Obviously, chemicals should not be taken internally, and the use of food, drink and smoking materials should be prohibited where chemicals are employed. The utensils used for dyeing should not be used for other domestic purposes (eg. food).

A final suggestion: Children and animals are naturally curious. Do not leave open jars or bottles, even for an instant, where little hands and paws can get to them.

Safety data sheets on individual products are available upon request.

## **RESIST MATERIALS**

The usual objective of discharging is to retain some of the original fabric color with melted wax, or one of the tie dye binding techniques.

## **THE NEUTRALIZER**

This helps prevent the deterioration of fibers by neutralizing the discharge agent that may be still remain in the fiber. Bleach and sodium hydrosulfite may be neutralized with sodium metabisulphite. Thiourea dioxide may be neutralized with vinegar.

## **DISCHARGE AGENTS**

**Chlorine Bleach** — Liquid household bleach containing from 5.25 to 6% sodium hypochlorite and 94 - 94.75% water, is the standard discharge product for stripping color from dyed fabric. Chlorine bleach may be used with the cellulose fibers: cotton, linen, and rayon but never on the protein fibers, silk and wool. Chlorine bleach will yellow and damage silk, and completely deteriorate wool. Some fiber deterioration occurs even with the cellulose group, making the process a bit risky and worthy of experimentation. Chlorine bleach has the distinct advantage of being easy, requiring very little equipment, and achieving subtle to dramatic effects.

**METHOD:** 1. Apply resist to fabric. 2. Determine the bleach to water ratio necessary for the desired shade. In a measuring cup, place 45 ml (3 Tbsp) of bleach to 125 ml (1/2 cup) of warm water. Immerse a small swatch of the fabric, agitate until it lightens. Remember the fabric will be considerably lighter when it dries. Experiment until the proper ratio is achieved, however, the proportions should not exceed 50/50 bleach and water. 3. Prepare the work area. It is best to work outdoors or in a well ventilated area as the fumes created by bleaching even a meter of fabric are annoying at best, and may be toxic at worst. Observe all cautions printed on the bleach container. 4. Prepare the predetermined discharge solution. Pour enough solution into a plastic dishpan or similar non-reactive receptacle (stainless steel, enamel, or glass) to cover the fabric. 5. Prepare the neutralizer in a second dishpan: 15 g (3 tsp) sodium

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