



Jacquard Acid Dye Instructions

BASICS:

The variables in dyeing are temperature, dye concentration, time and amount of fabric. The washing machine method is the easiest way to dye fabric a solid color. However, if you are concerned with achieving the most accurate and reproducible results, or getting the darkest colors, we recommend using the stove top method. Use the instructions as a guideline. Acid dyes are quite forgiving and amenable to variations in procedure. The more you experiment, the more you will discover!

SAFETY

- May irritate the skin or eyes.
- Avoid eye contact, wear rubber gloves and suitable mask.
- Breathing dust may be harmful.
- Keep out of reach of children.
- Utensils that have been used for dyeing should not be used in food preparation.

STOVE TOP METHOD: Best for wool.

1. Fill a stainless steel or enamel pot with just enough hot or warm water (cool for wool) for the fabric to swim freely. Turn the heat to medium.
2. Add the dye powder to the pot and stir until dissolved. Use the appropriate amount of dye for the desired shade (see chart on page 2).
3. Thoroughly wet fabric with warm water and add to dye bath.

4. Gradually raise the temperature to 185° - 200° F, just below boiling. Stir frequently.
5. Add a quarter cup of vinegar per pound of fabric. Another option is to add Citric Acid (1 tablespoon per pound of fabric). Try not to pour directly onto the fabric.
6. Maintain temperature and gently stir frequently for half an hour. Wash in Synthrapol® or mild detergent and warm water.

NOTE: If you are dyeing wool, a gradual heating and gradual cooling of the dye bath is important so as not to shock and felt the wool.

TOP LOADING WASHING MACHINE METHOD:

Not for wool. (Wool may felt in a washing machine—use the stove top method instead.)

1. Set the washing machine to the hot wash/cool rinse and longest wash cycle setting. Fill water to the lowest level appropriate for the amount of fabric being dyed. (Fabric must be submerged and able to move freely.)
2. Add dye powder and agitate until dissolved.
3. Add clean, wet fiber and agitate for a few minutes.
4. Add 1 to 3 cups of white vinegar (depending on volume of water) being careful not to pour directly onto fabric. You may also use Citric Acid, and add 1 tablespoon per pound of fabric. Let agitate a few more minutes.
5. Let machine run through cycle OR, for maximum washfastness, stop and reset washer to maximum cycle length. Do not let the washing machine drain or start a new wash cycle. The idea is to lengthen the time the fabric is in the dye bath. After resetting, let washer run through entire cycle.
6. To ensure that all the excess dye has been removed, you may want to run the fabric through another wash cycle with cool water and some Synthrapol® or mild detergent. Remove fabric.
7. Run washer through a large rinse cycle to remove any excess dye in the washing machine.

FRONT LOADING WASHING MACHINE METHOD:

Not for wool. (Wool may felt in a washing machine—use the stove top method instead.)

1. Dissolve the dye in approximately ½ to 1 cup hot water.
2. Pour the dissolved dye and 1 to 3 cups of white vinegar (depending on volume of water) into the bottom of the washing machine tub. You may also use Citric Acid, and add 1 tablespoon per pound of fabric. **IMPORTANT:** *If your machine has a pre-wash flush, add dye and vinegar between the flush and wash cycles to prevent the dye from being flushed from the machine.*
3. Add pre-wetted fabric.
4. Set your machine for the hottest possible water temperature and longest possible wash cycle. If you are able to extend the wash cycle, do so. The longer you are able to allow the fabric to remain in the wash/dye cycle the darker the color and the better the fixation.
5. When the machine has completed the wash cycle, allow it to complete the balance of the wash/rinse/spin cycle.
6. Wash the garment with a mild detergent in cold water and dry.

NOTE: We recommend a thorough cleaning of your washer after you have used it to dye fabric. Most front loading washers collect residual water in the front door gasket and will also hold water in the exterior tub. Wipe down the door gasket carefully and run a short cycle with your normal detergent after completing dye process. (You may want to refer to your Washing Machine Users Manual for cleaning instructions.)



DYE QUANTITIES - Washing Machine Method:

Here is the general dye quantities chart to give you an idea of where to start. The quantities listed are for the deepest color saturation. For pastels and lighter colors, use less dye. Amounts of dye given per pound of fabric. (Stove top method will require less dye.) Do not exceed 8% dye per pound of dry fabric.

.25 to .5 ounces	.5 to 1.5 ounces	1.5 to 2 ounces	up to 3 ounces
600 Ecru	604 Burnt Orange	606 Deep Orange	618 Fire Red
601 Yellow Sun	610 Burgundy	609 Scarlet	632 Chestnut
602 Bright Yellow	620 Hot Fuchsia	611 Vermillion	639 Jet Black
603 Golden Yellow	627 Kelly Green	612 Lilac	626 Navy Blue
605 Pumpkin Orange	628 Chartreuse	613 Purple	635 Brown
607 Salmon	633 Aztec Gold	614 Violet	
608 Pink	634 Olive	615 Periwinkle	
636 Gold Ochre	616 Russet	621 Sky Blue	
638 Silver Grey	617 Cherry Red	622 Sapphire Blue	
		623 Brilliant Blue	
		624 Turquoise	
		625 Royal Blue	
		629 Emerald	
		630 Spruce	
		631 Teal	
		637 Gun Metal	

FLOWABLE PAINTING:

For professional silk painters who steam set, liquid acid dyes provide the brightest, most intense colors. To make your own liquid acid dyes for silk painting, use the following recipe:

1. Add 8 oz. (1 cup) of very hot water to one 1/2 oz. jar of Jacquard Acid Dye powder.
2. Stir until dissolved. This will yield a very concentrated dye stock solution. Most colors require further dilution.
NOTE: Every color has a different solubility. Some colors are difficult to dissolve, but most are easily dissolved. A small amount of alcohol (about 1 tablespoon) can be added to the dye solution as a wetting agent.
3. The final concentration of the dye solution for painting should be between 4 and 8%. Start by adding 4 oz. (1/2 cup) of water to the 8 oz. of stock solution you have, test the color and continue adding water until desired shade is achieved.

Keep in mind that the color intensity really develops in the steam setting process. Most colors will remain stable in solution for a long period of time. However, some colors will fall out of solution upon cooling or from sitting for a matter of weeks. To restore them simply heat them on the stove.

SCREEN PRINTING, STAMPING & PAINTING:

The traditional method of printing with dye is to add the dye to a thickener paste. This method can be used for screen printing, hand-painting, and stamping and many other direct application techniques. It is important to prepare the fiber by washing to remove the sizing.

1. Wash, dry and iron the fabric.
2. Prepare dye thickener paste (see below).
3. Add dye, either powder or stock solution, to thickener. Proportion the dye in the container in relation to the amount of thickener paste and desired intensity.
4. Print, paint, or stamp on fabric.
5. Air dry. Steam set (follow your steamer's instructions).

PREPARING DYE THICKENER:

When screen printing with dye thickened with sodium alginate, the print base should be as thin as the image will allow. Dye printed in too thick a base will halo from the image before the fabric is cured or will accumulate in the corners, altering the image. Sodium Alginate SH is a high viscosity, low solids type of alginate thickener used primarily for cotton and other cellulose fibers. It may also be used for silk when fine line definition is not required. Sodium Alginate F is a low viscosity, high solids alginate used for silks and synthetics when fine line definition is desired. Use about 2 1/2 times more of the F to equal the viscosity of SH.

1. Mix chemical water by adding 1/4 cup of urea & 1 tablespoon vinegar to 1 quart of water.
2. Sprinkle sodium alginate over water and stir constantly for 10 minutes, OR mix in blender.
3. Let stand for a few hours or overnight before using. Mixture may be stored in refrigerator for many months.

Kurzanleitung Deutsch für Acid Dye Säurefarbstoff (übersetzt)

Die Variablen beim Färben sind Temperatur, Farbstoffkonzentration, Zeit und Menge des Gewebes. Wenn Sie jedoch möglichst genaue und reproduzierbare Ergebnisse erzielen oder die dunkelsten Ergebnisse oder die dunkelsten Farben erzielen möchten, empfehlen wir die Kochfeldmethode. Verwenden Sie die Anleitung als Richtlinie. Saure Farbstoffe verzeihen recht gut und sind offen für Variationen in der Vorgehensweise. Je mehr Sie experimentieren, desto mehr werden Sie entdecken!

Färben im Kochtopf oder Pfanne (am besten für Wolle geeignet)

14 Gramm pulverförmigen Farbstoff, reicht aus um ca. 450g trockene Wolle mit einer durchschnittlichen Sättigungstönung zu färben. Die benötigte Menge kann je nach gewünschtem Sättigungsgrad variieren.

1. Füllen Sie einen Topf aus rostfreiem Stahl oder Emaille mit so viel heißem oder warmem Wasser (bei Wolle kühl), dass der Stoff frei schwimmen kann. Warmes Wasser (bei Wolle kühl), damit der Stoff frei schwimmen kann. Drehen Sie die Hitze auf mittlere Stufe.
2. Geben Sie das Farbpulver in den Topf und rühren Sie es um, bis es sich aufgelöst hat. Verwenden Sie die für den gewünschten Farbton geeignete Menge an Farbstoff.
3. Feuchten Sie den Stoff gründlich mit warmem Wasser an und legen Sie ihn in das Färbebad.
4. Erhöhen Sie die Temperatur allmählich auf 80° - 90° C, knapp unter kochend. Häufig umrühren.
5. Geben Sie eine viertel Tasse Essig pro Pfund Stoff hinzu. Eine weitere Möglichkeit ist die Zugabe von Zitronensäure (1 Esslöffel pro Pfund Stoff). Versuchen Sie, den Essig nicht direkt auf das Gewebe zu gießen.
6. Halten Sie die Temperatur aufrecht und rühren Sie eine halbe Stunde lang häufig um. Mit Synthrapol® oder Feinwaschmittel und warmem Wasser waschen.

Färbung in der Waschmaschine (für Stoffe geeignet)

Färben Sie keine Wolle in der Waschmaschine, da diese verfilzen kann.

1. Verwenden Sie die entsprechende Menge an Farbstoff für den gewünschten Farbton
2. Lösen Sie das Farbpulver in heißem Wasser auf.
3. Längsten Waschgang wählen und die Temperatur auf ca. 85° - 95°C einstellen (je länger der Waschgang, umso intensiver die Farbe)
4. Nach ca. 10 Minuten die aufgelöste Farbe über das Waschmittelfach einfüllen. Fügen Sie zusätzlich 1 Esslöffel Zitronensäure pro Pfund Stoff (Alternativ können Sie auch 1-3 Tassen weißen Essig nehmen (je nach Wasservolumen)
5. Um sicherzustellen, dass die überschüssige Farbe vollständig entfernt wurde sollten Sie den Stoff in einem weiteren Waschgang mit kaltem Wasser und etwas Feinwaschmittel waschen. Nehmen Sie danach den Stoff heraus.
6. Lassen Sie die Waschmaschine einen langen Spülgang durchlaufen, um überschüssige Farbe in der Waschmaschine zu entfernen.

Allgemeine Farbstoffmengen-Tabelle für die Färbung in der Waschmaschine

Die Menge kann individuell angepasst werden um die gewünschte Farbsättigung zu erzielen.
Nehmen Sie nicht mehr als 8 % Farbstoff pro Pfund trockenen Stoff.

Farbgruppe 1:

7 - 14g Acid Dye

600 Ecu
601 Yellow Sun
602 Bright Yellow
603 Golden Yellow
605 Pumpkin Orange
607 Salmon
608 Pink
636 Gold Ochre
638 Silver Grey

Farbgruppe 2:

14 - 42g Acid Dye

604 Burnt Orange
610 Burgundy
620 Hot Fuchsia
627 Kelly Green
628 Chartreuse
633 Aztec Gold
634 Olive
616 Russet
617 Cherry Red

Farbgruppe 3:

42 - 57g Acid Dye

606 Deep Orange
609 Scarlet
611 Vermillion
612 Lilac
613 Purple
614 Violet
615 Periwinkle
621 Sky Blue
622 Sapphire Blue
623 Brilliant Blue
624 Turquoise
625 Royal Blue
629 Emerald
630 Spruce
631 Teal
637 Gun Metal

Farbgruppe 4:

bis zu 85g Acid Dye

618 Fire Red
632 Chestnut
639 Jet Black
626 Navy Blue