

Here is the link to Dharma Trading where you can purchase all these dyes.

<https://www.dharmatrading.com/>

Step by Step Instructions for Procion dyes:

<https://www.dharmatrading.com/techniques/tubdye/the-tub-washing-machine-vat-bucket-dye-method.html>

Pre-Wash your fabric. Use HOT water and 1/4 cup Synthrapol or Dharma Professional Textile Detergent (PTD) per machine load. This will remove any dirt, grease, or other gunk. Use Enzyme detergents to remove starch. Fabrics treated with permanent press, conditioners, sizing or water proofing, etc are not recommended. This is a very important step. Pre-washing really can make all the difference. We even recommend always pre-washing so called PFD (Prepared For Dyeing) fabrics, as you never know "where they've been". Even fingerprints can cause blotchy dyeing. Be sure the fabric is wet.



Dissolve your dye. Paste up the [Fiber Reactive Dye](#) with some warm water, smashing it with a spoon, like making gravy. Next, add about a cup of warm water (more if you are dissolving lots of dye, like with black) to the dye paste to make a well dissolved slurry. Finally, add to the tub or bucket and stir to mix evenly. (for dye measurements [click here](#))

Note: Some colors can be harder to dissolve than others, especially some reds (including mixes with red in them, like purples, blacks, browns, etc.), as well as some of the darker yellows. Use approx. 1 TBS of Urea dissolved in 1 cup warm water to make your dye slurry as above. Urea is an excellent dissolving agent. To prevent "freckles" of undissolved red, you can even use some thin fabric like 5 or 8mm Habotai silk or something comparable in a funnel over your dye bath and filter your well thinned and dissolved dye. Re-paste up any dye caught in the filter so you don't end up skewing the final color.



Pour the required amount of the Non-Iodized Salt* into the dye bath. Add [Calsolene Oil](#) (Optional—breaks surface tension for more even, less streaky results; highly recommended for large loads).



[+] enlarge

Add your wet fabric. Stir gently, but frequently, for 20 minutes. In a washing machine, set it to agitate. *Don't let it drain out!*—with most machines you have to keep setting it back to the beginning of the cycle. Use a timer so you don't lose track—nothing worse than losing your dye down the drain before you're done! The washing machine is recommended for large loads, when you are too busy to stir frequently enough, or for the most even results.



[+] enlarge

Add the Soda Ash. Dissolve [Soda Ash](#) with warm water and add slowly, over about 15 minutes, to the dye bath while stirring. Don't pour it directly onto the fabric (concentrated Soda Ash solution touching the fabric can leave darker splotches!) When using a washing machine, turn it off and use something to move the fabric over to one side while adding the Soda Ash in to the otherside. Mix the soda ash solution into the water before stirring the fabric around or turning the machine back on. Stir frequently or set machine to agitate again—30 min. for light colors, 1 hour for deep colors.



[+] enlarge

Rinse & wash out excess dye. Use cool running water until it runs almost clear, or put it through a couple of rinse cycles in the washing machine. Then wash in HOT water using [Synthrapol](#) or [Professional Textile Detergent](#) to finish washing out the excess dye. With some of the darker colors, like blacks or reds, a second wash may be necessary. Additionally, using [Milsoft](#) (a concentrated, professional fabric softener) according to its directions will restore a luxurious softness to fabrics that have been dyed.



[+] enlarge

Measurements / FAQs:

How much dye do I need?

The easy way: If you don't have a precise scale, and don't care about color matching or repeatability: for medium shades of most colors add 1 tablespoon of dye per 1 lb. of fabric (3 gallons of water), or 1/2 cup (two 2oz jars) of dye per 8 lb. washing machine load (20 gallons of water). Please note: Colors marked with * on the color card or jar label require double those amounts, and those marked with ** require 4x those amounts to get the depth of shade on our color card.

For more exact shades: check out our [Procion Dye Yields & Estimator page](#). Weigh your dye with a small scale to get the correct amount, a percent of the dry weight of the fabric you are dyeing. Dye densities can vary from lot to lot, so weighing is much more accurate than measuring out tablespoons and cups. For repeatable shades, keep careful records of the proportions you end up using and keep track of any "tweaking" you do. Also, try to get enough of one dye lot for your whole project (hugely important as dye lots vary)!

For lighter shades: reduce the amount of dye, and for even deeper shades, increase the dye.

If color is really critical, always do a test before embarking on your main project! Keep in mind that colors can vary based on many different variables, and the color charts are only a guide (color chart printings and computer monitors aren't always accurate either). Colors can vary depending on fabric, water (ph, hardness, etc), dyelot, and many other things.

*How much Soda Ash and Salt do I need?

The amount of Non-Iodized Salt and Soda Ash are a function of the amount of water used. **For each pound of dry fabric you will need about 3 gallons of warm water.** The water must cover the fabric with enough room for thorough, tangle-free stirring; otherwise you get uneven dyeing and streaks. For each 1 1/2 gallons of water use 1 1/2 cup of Non-Iodized Salt and 1/6 cup of Soda Ash. For black dyes, use 2X the amount of Non-Iodized Salt.

1/2 LB DRY FABRIC	1 LB DRY FABRIC	8 LB MACHINE LOAD
1/2 Tbsp dye depending on shade desired	1 Tbsp dye depending on shade desired	1/2 cup dye (4 oz.) depending on shade desired
1 1/2 Gal. Water	3 Gal. Water	20 Gal. Water
1 1/2 cups Salt	3 cups Salt	20 cups Salt
1/6 Cup Soda Ash	1/3 Cup Soda Ash	2 1/2 Cup Soda Ash
1 tsp. Calsolene Oil	2 tsp. Calsolene Oil	2 Tbsp Calsolene Oil

Dharma used a simple recipe to get these great colors with our [natural dyes](#) so you can have a reference for the colors they will give.

Keep in mind there are many recipes and mordants that will yield a wide range of colors and shades from each dye material, so consult a natural dye book for more on this. We carry [Wild Color: Revised and Updated Edition](#).

Indigo is in a class by itself, so a different recipe is used, also available on our website.

For the deepest colors, use a ratio of 1 to 1 dyestuff to fabric, or 2 oz dye to 2 oz fabric, but you can still get good colors using much less dye. We used about 3-4 tablespoons per yard of fabric. Cochineal is an exception as it is very concentrated, so use only about a 20% ratio. The dyebaths can be re-used to get lighter shades. Experimentation is the best way to determine the right amount of dye for the type of fabric you are using and the color. We found the [silk](#) and velvet absorbed the colors the deepest. Some cottons will yield different and deeper shades using Tara Powder (a form of tannic acid) as a mordant with soda ash as an assist.

Yellows can be overdyed with indigo to get shades of green, and reds overdye with indigo will give purples.

The Method:

1. Prewash your fabric with [synthrapol](#), rinse well.
2. To mordant the fabric (or fiber or yarn) simmer together with 1.75 tsp [Alum](#) and 1 tsp Cream of Tartar per pound of fabric for 1 hour. Allow the fabric to cool in the solution. Squeeze out excess water from material. Rinse and discard solution. (all the alum will be absorbed by the fabric) You can allow the fabric to dry if you want to stockpile some pre-mordanted material, but you want to use it in about a month as over time the alum can degrade the fabric.
3. Measure and simmer your dyestuff for an hour using enough water so your fabric can move freely, allow to cool. You may need to chop up larger roots, such as when you use madder. Roots also like to be soaked overnight for some of the darkest shades. This is best done before you mordant or at the same time.
4. Strain out any roots, shavings, etc.
5. Add wet fabric and simmer for an hour, allow to cool in dyebath for maximum color absorption. Be sure to stir periodically for even dyeing, turning fabric frequently while simmering. You can save and re-use the dyebath for lighter shades.
6. Give the fabric a final gentle wash with [synthrapol](#) and rinse.

For 1 lb. of fiber or fabric you will need the following:

- $\frac{1}{2}$ oz [Indigo](#) for light blue or 1-2 oz for darker blues.
- $\frac{1}{2}$ oz [Dharma Dyehouse Color Remover](#) (Thiorea Dioxide)
- $\frac{1}{2}$ oz [Soda Ash](#)
- 2-3 gallons of water

Important: Before starting any dye project you should always do a test run on scrap fabric first. Dyeing with Indigo is a process with many variables, and as with any new process, common sense dictates that you always TEST FIRST if you have something specific in mind. If you are more flexible, you will be enthralled with the range of beautiful traditional blues you can get. You can also overdye Indigo dyed fabrics with other natural dyes to get other colors. If you have a chemistry student in the family, and they know how to handle chemicals safely, the chemistry of getting to the blue cloth makes for a very interesting project.

DYEING WITH NATURAL DYES

<https://www.dharmatrading.com/dyes/natural-dyes-from-plants-and-insects.html?lnav=dyes.html>

Pour powdered indigo into 1/4 cup hot water. Stir until dissolved. Pour dissolved indigo into a large pot of water. In a separate jar, dissolve the Soda Ash in some warm water. Add the Soda Ash solution to the Indigo and stir. This increases the PH of the dyebath to prepare for "reducing" the dye and making it soluble in water. Add half (1/4 oz) of the Dharma Color Remover and stir gently. Heat to between 120°F and 130°F continuing to stir gently. The liquid should appear yellow or yellow-green and may even have a bit of a "scummy" appearance – somewhat like a witch's cauldron; this is okay. Let the mixture stand for 20 minutes. If the water appears blue, too much oxygen has entered the dye bath and you will have to add more Dharma Color Remover into the bath and stir GENTLY to reduce the indigo. To get the best tones from the indigo, you should avoid letting too much oxygen get into the pot as it causes the dye to precipitate out of solution. This means you must work much more slowly and gently than with other colors. You may find it helpful to tie a line of thread to one corner of your fabric before immersing it in the dye as this will make it easy to fish your fabric out of the pot without stirring excess air into the dye bath.

After the dye has steeped for 20 minutes you may then add your fabric. The wet, pre-washed fabric can be compressed into a ball, lowered into the dye bath and then allowed to expand. Again, stir GENTLY. The first fabrics will only need to be immersed for a few minutes to absorb the maximum color while fabrics added later may need to stay in for 5 to 10 minutes. When the fabric is removed from the dye pot, it should first look yellow-green and then turn blue after it comes into contact with the oxygen in the air. This is where the dye is "oxidizing" again, and becoming once more insoluble in water, which is what makes it stay "trapped" in the fibers of the fabric. You can also re-do the dyeing more than once - successive "dippings" and oxidizing yields deeper and deeper blues, and is the best way to get dark color. If instead you try to get a dark blue by one but much longer and more concentrated dyebath, like you might with other dyes, most of it will just wash out or rub off. When you have reached your desired depth of shade, you need to wash out the chemicals and excess Indigo. As with all dyes, wash out the fabric in Hot water and Synthrapol or [Dharma's Professional Textile Detergent](#) to get out the all of excess dye. This is a very important process, or the dye will "crock" or rub off on you and you will look like you are trying out for the "Blue Man Group". One thing that helps to have less dye come off and less fading in the future, is after one brief rinse, to put the fabric in a hot soak with [Dharma Dye Fixative](#) or [Retayne](#) for 1/2 hour (1 oz fixative per lb. of fabric). This causes more of the Indigo to stick to the fabric. Then do the [Synthrapol](#) wash and you are good to go. The fabric will fade less with successive washings also.

To get the best, most even dyeing results it will be easier to work outdoors and with another person. When the fabric is removed from the dye bath, you can hang it, or a fun thing is to take the cloth and stretch it tautly from all four corners (like when folding a sheet) at a vertical angle so the excess dye can run over the surface of the fabric. Tilt the fabric back and forth so that the dye runs in all directions over the fabric; this step is not a requirement but without it the dye may strike unevenly and the result can look like a cloudy sky with lighter and darker areas of blue.

After a few minutes of exposure to the air and the desired blue hue has been achieved, the excess dye can then be rinsed off. If your color has turned out unevenly you can repeat the dye process to help even out the color. Fabrics that are tied or clamped as in Tie-dye or Shibori look fantastic when dyed with Indigo.

Instructions on using Dye-Na-Flow Fabric Paints

<https://www.dharmatrading.com/paints/dye-na-flow-fabric-paint.html>

Simply apply Dye-Na-Flow Fabric Paints to pre-washed fabric with a brush, squirt bottle, sponge, or airbrush. Let dry. Iron fabric for 3 minutes on dry setting appropriate for fabric. Wash in cool water with Synthrapol and rinse.