Preshrinking: Learn the What, Why, When and How

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Here’s a common scenario: you buy a new garment, wear it once, wash it once, and... it is now two sizes too small! Some of us also use this phenomenon to explain why our once-favorite pants no longer fit. Although extra bowls of ice cream are the likely culprit in scenario #2, the guilty party behind scenario #1 is: improper preshrinking! Garment manufacturers often cut corners by skipping the preshrinking step in their construction process. You shouldn’t make the same mistake. In the world of sewing and quilting, the ongoing great debate is: “Do you preshrink (or prewash) fabric before sewing with it or not?!” We’ve done our famous S4H research on the subject, and the resounding advice from professionals, and those who have learned the hard way (yes... we’re in that bunch) is YES! Read on for the details, methods and some popular products to try.

There are those who never preshrink their fabric, because they prefer to work with the fabric “fresh” if you will, or they are simply too anxious (you know who you are) to wait through the washing process before getting started on the next project. There are others who preshrink their fabric depending on how they plan to use it: if the item is going to be washed regularly then they preshrink the fabric; if it won't be washed, they won't prewash.

Regardless of which category you fall into, you may want to review the information we’ve compiled here to make sure you’re making the best choice for your sewing project and fabric investment.

In our research, we reviewed fabric glossaries, websites, and blogs, as well as discussion groups comprised of garment specialists, quilters, and, believe it or not, knitters (they have to wash their fiber too!). We wanted to look at a broad range of types of sewers and sewing to compare and collect reasons when or when not to preshrink (or prewash) fabric, what products to use, specific home techniques, and other tips.

Quilters discuss the topic all the time (seriously, they do). Some will tell you they always preshrink their fabrics to eliminate the “antique” or wrinkled look that happens when finished quilts are washed and dried. Others prefer not to preshrink their fabrics because they need superior precision. Washed fabrics can get a little limp and are not the best to work with for piecing. Plus,
many highly intricate quilts are really art pieces rather than actual useable quilts, and so aren't meant to ever be laundered. Those who do pre-shrink will also tell you applying a liquid sizing to washed fabrics helps gain back a fabric's crispness.

Most quality quilting cotton pre-cut bundles do not need pre-shrinking. In talking with Moda Fabrics, one the industry leaders when it comes to pre-cut options, they confirm pre-shrinking is not necessary with their pre-cuts. "Moda pre-cuts never need to be pre-washed. Pre-washing means pressing and that takes a lot of the ease-of-use factor out of the pre-cuts, and you could also end up with a big tangle of thread ends."

The standard wisdom is: "if you preshrink one thing, preshrink everything." One exception is when you're mixing a quality cotton pre-cut with a less-expensive cotton or even a vintage cotton, these different fabrics could shrink at different levels when your finished project is laundered, leading to some wonky seams. The high-end, new cotton pre-cuts should still be fine without pre-shrinking, but consider preshrinking the other pieces.

Garment sewers are usually pretty savvy about preshrinking because of the variety of fabrics they work with to create clothing. The majority of folks in this group are advocates of preshrinking because if the fabric shrinks after the fact, the garment won’t fit. Plus, garments need regular cleaning and care.

A big part of sewing is knowing your fabric. A big part of knowing fabric is understanding how to care for it. The key is fiber content. The manufacturing process that fiber goes through to become fabric is often what makes it shrink. Take the time to learn about fabric and how to identify quality, as this directly relates to the amount of shrinking you may witness. We've all been guilty of finding and falling in love with fabric before we even have a use for it. If you buy and add to your stash, always include a few care and content notes before you put it away. You can find this information on the end of the bolt. Take a look at our tutorial: Sewing 101: How to Read a Fabric Bolt

**Fabric manufacturing**

To start the conversation about fabric manufacturing, we have to discuss natural fibers versus synthetic fibers. Natural fibers are fairly easy to identify; they come from vegetables or animals. The list includes: cotton, wool, silk, jute, flax, and bamboo. Synthetic fibers were born of scientific discoveries, and include polyester, nylon, viscose, rayon, and acetate. There are certainly others, but these are the most common.

Fabric is created through weaving, knitting, braiding, bonding or interlocking processes. Within each process, the type of fiber
used will determine how it is treated in order to prepare it for manufacturing. The treatment usually involves coating or washing the fibers with some type of chemical. There's always a reason for the use of these chemical processes, whether to strengthen the fiber, give it a specific finish, make it resistant to fading or mildew, and/or withstand the dying process – just to name a few.

One chemical that may sound familiar to you is 'sizing.' When woven fabric is manufactured, sizing is applied to the warp yarn in the weave. This is similar to what we do in hand sewing when we run our thread through beeswax or thread protectant to strengthen it prior to sewing. It's the same idea with fabric manufacturing. The warp yarn goes through pretty rigorous motions in the weaving process as the weft yarn passes over and under it. The warp yarn is more susceptible to breakage, therefore, preventative treatment of the fiber is common.

It’s the sizing we end up affecting in the prewashing process, especially the first washing. Think about when you have a new garment, or any other washable textile item. After that first washing it's never as crisp as when it came off the hanger at the store. This is the reason you find a wide selection of spray sizing and starches available to restore some of that original crispness with ironing/pressing.

We have an entire tutorial about fabric weaves, but here is the CliffsNotes version: vertical (lengthwise) threads are attached to the loom itself. These are called the WARP threads, and they are the basic foundation of the fabric. Next, threads are woven between the Warp threads, usually at a 90° angle. These fill in the fabric, and are called WEFT threads. (One great mnemonic device for remembering the difference is to say, "Weft goes right and left"... plus, it makes you sound like Elmer Fudd.) The Weft threads create the selvedge of the fabric. The variations in the way the Warp and Weft threads criss-cross each other is how different weaves of fabric are created.

**Determining fiber content**

As we mentioned above, the easiest way to determine fiber content, and a bunch of other useful information, is to read the end of the bolt or tag hanging from the roll. Manufacturers keep no secrets here, they provide you with the exact fiber content and care instructions. This is your guide to how you should care for your fabric.

But, what if (for whatever reason) you don't have the care instructions for your fabric? There's a technique called the "Burn Test" that fabric experts use to determine fiber content by the way the edge burns. We are not recommending you take a
match to every piece of fabric you have, and aren't going into specifics here, but if you want to learn more about it, a basic Internet search will explain how to read the results. Or, maybe someone at your local fabric retailer knows how to do a burn test. It's fun to watch!

**Preshrink at home or go to the dry cleaner?**

Once you’ve determined you need to preshrink your fabric, you must determine which method to use: home or professional. If you’re anxious to cut into your fabric, you just have to cool your jets. There’s no quick approach; each method has a time investment as well as a financial investment. Remember, when you invest your money, time and creativity into a sewn project, the last thing you want to do is ruin it by improperly preshrinking the fabric. Quality fabric is worth quality care!

In order to determine whether to preshrink a fabric at home or take it to the dry cleaner, you need to go right back to fiber content. Below is a brief category list of fabric types, which we’ve divided into "preshrink at home" and "take to the dry cleaner" categories.

**Fabrics you can preshrink at home:**

- Cotton
- Linen – some, not all
- Nylon
- Polyester
- Acrylic
- Micro-Fiber

**Take to the dry cleaner for preshrinking:**

- Wool
- Silk
- Linen – some, not all
- Rayon
- Acetate
This list is by no means finite or absolute! There are a tremendous number of fabric substrates, each with its own specific care instructions. One type of cotton may be fine for home preshrinking, while others may be best left to a dry cleaner. You can’t just assume. You should take a few minutes to reference a fabric glossary or the Internet for information about your selected fabric. A side benefit is you’ll find more than just care instructions; you’ll also discover information about which type of sewing machine foot, needle, and thread to use for sewing. And, there’s often advice on cutting, seam finishes, and more.

We also want to caution you about specialty fabrics, like leather, suede, fur, velvet, and embellished fabrics (ones that are pre-beaded and embroidered, etc.). You definitely want to be cautious about any treatment, even professional, on these babies. They require extra care due to their unusual nature. For example, you want to be sure a dry cleaner provides reputable service for leather or suede. Microsuede on the other hand should not shrink during machine washing. It can be washed on gentle with a low sudsing soap. It's also best to wash it separately from other items as some colors can bleed. It is not meant to be dried in the dryer. Most manufacturers suggest hanging to dry.

The same goes for beaded fabrics. It’s important to know if the beads are hand sewn to the fabric or glued. Again, reviewing the information on the end of the bolt will be most helpful!

**Home preshrinking methods**

From the groups of sewing enthusiasts we’ve reviewed, we found a number of home methods for preshrinking fabrics. On average, the most shrinkage occurs in the first washing, but sometimes there’s more to come. This is known as *progressive shrinking*. As a result, you may need to wash the fabric multiple times. With some fabrics, you can wash the fabric yardage at home, but will end up dry cleaning the finished project. Again, you have to investigate which method is appropriate for your fabric type/fiber content.

**Washing machine and dryer**

The go-to appliance in the house for preshrinking fabric is the washing machine and clothes dryer. Most modern washing machines have options for water temperature and cycle. These are both important, depending on fabric type. You may find a cold temperature setting and delicate cycle to be your best friend. Skipping the dryer is also common; air-drying is best for many fabric types. But some fabric treatments use only the dryer (see below). The rule of thumb is to wash the fabric the same way you will wash the finished item. But, as we keep stressing, there’s always an exception to the rule! And, always wash like colors together; color bleeding is always an issue to be concerned about.

**Hand wash**

Hand washing tends to get a frown from many people, mainly because of the wet dripping mess hanging in your laundry room for a day or two. However, there are many delicate fabrics that are best treated and preshrunk with hand washing. We’ve provided a list of good soaps and detergents below.

**London Shrink Method**

For wools only, the London Shrink Method is basically a 24-hour process that requires a lot of water and a big space to work. Using a wet bed sheet or two, lay the wool on the sheet(s) and roll it up. When the wool fabric is thoroughly wet, unroll it and let it air dry. Do this on a day you can be nearby as you should check and recheck the fabric as it dries naturally. Plus, depending on the wool, the process may have to be repeated. When done, you usually have to steam the fabric flat.

Alternatively, you can use a couple of wet bath towels in your dryer with the wool to shrink it. Set the dryer to high heat for 40 minutes; when complete, lay the fabric flat to cool.

**Steaming**

Not everyone has a professional steam press at home, so you can also use wet pressing cloths and your iron, set at the highest temperature, to steam fabric. Depending on the type of fabric (yes we said it again!), this steaming process will preshrink on all its own.

You will find both garment sewers and quilters who simply love to "steam the heck out of their fabric." We read a long blog post about a garment sewer who adores wool crepe. She always uses steaming instead of dry cleaning or the London Shrink
Method. We also read of quilters who use a steam iron, instead of preshrinking in the washing machine, to set the dyes in cotton fabrics yet still maintain the stiff "hand" (the feel) of new, unwashed fabric.

In summary, the end use for your sewn item is as important as are the recommended care instructions for the fiber content of your fabric. Even if you plan to sew a tote bag you don't anticipate ever needing to launder, what if it gets dirty or something accidentally spills on it? If you haven't prewashed the fabric, your favorite bag will never look the same. Think things through.

Products to use

Below is a list of special washes, soaps and other products to consider for preshrinking as well as the ultimate care of your fabric. It's by no means conclusive and we don't have experience with all of these. Like the initial decision of when and how to preshrink, the products to use are a personal choice.
Soak Wash – A liquid laundry soap for delicates in a variety of fragrances (non-fragrant too) that requires no rinsing.

Orvus Quilt Soap by Quilter’s Rule – This is a detergent not a soap, made of 100% sodium lauryl sulfate (SLS) with a neutral pH that is completely biodegradable.

Eucalan – Can be used in your machine or for hand washing. It’s environmentally friendly with just two main ingredients: eucalyptus and lanolin.

Kookaburra Wash – A plant-based product, which can be used in the washing machine or for hand washing.

Dr. Bronner’s – This "hippie classic," is fair trade and organic, biodegradable, and vegetable based. Recommended for wool and silk.

Forever New – Also environmentally friendly, originally designed for stretch fabrics and delicates. Recommended for fine silks.

Charlie’s Soap – Non-toxic and biodegradable, preferred by those who sew with cottons.

Baby Shampoo – Budget friendly and known to be gentle.

Mary Ellen’s Best Press – This company offers a variety of laundry products, including liquid sizing, which many quilters like for restoring stiffness to cotton fabric after preshrinking.

Spray Starch – Readily available in the cleaning products section of your grocery store. There is some debate that using it can leave white flakes on the fabric.

Mesh laundry bags – You may already have one or more of these for your knit sweaters or lingerie. Since you sew, you can also make these in multiple sizes. We have a tutorial you can try.

Pillowcases – These you most likely have too! They can be used in place of a larger mesh laundry bag.

Dye Removers/Grabbers – Color bleeding can certainly be an issue in the preshrinking process. It’s recommended you always conduct a bleed test, or use a product that can grab or remove loose dyes in the water. A common option is Synthrapol.

Dry Cleaning Kits – You may have seen these at your grocery store. We didn't find many rave reviews, but they are worth a mention.

What about linings, interfacings, trims, batting, or fillers?

Linings

Basically, the same preshrinking rules we’ve outlined above apply here too. Ever have a pair of lined pants where, over time and cleaning, you found the lining hanging out the bottom? One of two things happened: the pant fabric shrunk with cleaning, or the lining stretched out of shape. We’re gonna go with the fabric shrinking. It probably would have helped if both were preshrunk, right?

Interfacings

Interfacings (woven, non-woven, fusible or non-fusible) are an important part of the construction process. It’s equally important to select the appropriate one to match your fabric type (and its care instructions). Some interfacings indicate they are preshrunk and ready to be sewn. However, there are some people who preshrink their interfacings in order to prevent any distortion in their sewn items. To preshrink interfacing, you have to soak it in cool to lukewarm water, roll it in a towel to dry, then hang it to dry overnight. Fusible interfacing should not go into the clothes dryer. The idea is to maintain the interfacing’s shape so it can still do its job properly. We also read a few sad tales of fusible interfacing being soaked in hot water and having the fusible beads float away, turning it into a non-fusible interfacing. We tend to be in the “go with a preshrunk option when possible” camp. Most of the well-known brands can be used without preshrinking.

Trims

If you plan to add any type of piping or specialty trim to your sewn project, you have to preshrink these too! It’s unanimous that using a mesh laundry bag (or pillowcase) is ideal for keeping trims tame in the washing cycle. As we outlined in our
tutorial: Terrific Trims Take #2, manufacturers provide care instructions on the trim holders and packaging. Pay attention to these notes.

**Batting**

Since batting tends to be fragile, most washing processes cause it to simply fall apart, and preshrinking is not really recommended. However, shrinkage is expected with 100% cotton batting. Once a project with batting is washed, it can shrink up a bit. This is what contributes to that "antique" look we mentioned above for quilts that have been laundered. One option is to place the cotton batting in a laundry basket, submerge it in a bathtub, press it to remove the water, then lay it flat to dry completely. We did find a few personal stories of quilters who use the gentle cycle in their washing machine, then remove the batting and let it air dry.

**Our preshrinking experiment**

We cut in half a yard of brown striped woven cotton we had laying around the Sew4Home studio.

We washed one of the ½ yard cuts so we could compare it to the original.

We chose to wash it in the washing machine, using warm water and a little detergent. As you can see, the cut edges of the fabric frayed a lot.

We then dried it in the clothes dryer on medium heat. It was still damp when we took it out.

We let it air dry the rest of the way, then measured it against the unwashed ½ yard. As you can see below, the fabric shrunk about 2” total (the fabric is folded in half selvage to selvage).
This exercise certainly convinced us to take the time to preshrink our fabrics before starting a project!

**Other great tips we’ve gathered**

Immediately wash fabrics when you get home from the fabric store, so they’re ready for use when creativity strikes. If you’re not going to be using the fabric soon, as we mentioned above, remember to label it with all the pertinent care information prior to storing.

Since fabric is cut on two edges, depending on the fabric type, there can be varying degrees of fraying with prewashing. You can use a zig zag or overcast stitch on your sewing machine or a serger to overcast the edges prior to washing to eliminate or lessen the fraying. You can also try simply cutting the edges with pinking sheers.
When preshrinking knits, baste the two cut ends together to form a tube. This will prevent the knit from curling during prewashing, which is prone to happen. It makes working with the fabric much easier afterward.

Even when washed in the mesh laundry bags suggested above, trims can tangle. Try wrapping them around plastic canvas (the stuff they use for needlepoint and other crafts) prior to putting them in the bags.
Build up some quality resource libraries about fabric to reference as needed. There are many books available, blogs where people share their experiences, and company websites are full of information.

When you research information about a fabric type, take note of any information on treating stains too!

Dry clean vs. dry clean only: there is a difference! When manufacturers (especially in ready-to-wear) label a textile as Dry Clean it simply means this is the recommended care option. Dry Clean Only is not a suggestion! Take a look at the tips from our friends at Waverly about the options to dry cleaning for their home decor and outdoor fabrics.

Interview your dry cleaner. It may sound a little silly, but not all dry cleaners are familiar with yardage, special fabric types, etc. Those who work with tailors are usually the most well-versed in preshrinking.

If you’re unsure of how you will be preshrinking, purchase a little extra to test, test, test.

If you really want to get into the preshrinking debate, there’s such a thing as a shrinkage calculator as well as a shrink test you can follow on the Internet.

Contributors

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Sewing Tips & Tricks

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