

## Safe Solution for Fabric Softeners

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### STORY AT-A-GLANCE

- › Commercial fabric softeners contain numerous toxic chemicals “readily absorbed” into your skin and lungs, causing numerous reproductive and developmental problem
- › Most of our exposure to hazardous pollutants occurs indoors. Fabric softeners are one source of pollutants that can cause skin and respiratory problems
- › You can make your own far healthier liquid fabric softener using such ingredients as Epsom salts, vinegar and baking soda, or create dryer balls from 100% wool fabric scraps, yarn and essential oils

***Editor's Note: This article is a reprint. It was originally published February 1, 2017.***

Most people do their cleaning with as little muss and fuss as possible, but in recent years it's begun to enter the mainstream consciousness that the "easy" way may also be the toxic way. Incredibly damaging chemical mixtures make up the active ingredients in a staggering number of products many people use on a daily basis. Fabric softener can be included in this category.

Body creams, scented candles, air fresheners and bathroom cleaners are just a few additional items most Americans throw into their shopping carts as a matter of course, rarely thinking for a moment that it might as well be rat poison they're sprinkling onto their carpets, spraying onto their upholstery and massaging into their skin.

Fabric softeners may top the list as one of the worst offenders, and may be one of the products environmentalists had in mind when the term "indoor pollutants" was coined.

Alarming, many of these toxins are approved by the U.S. Environmental Protection Agency (EPA).<sup>1</sup>

Fabric softeners were designed to free your clothes of both wrinkles and static cling, and give them a fresh fragrance. But what amalgamation of ingredients have the teams of scientists concocted in laboratories to bring you these indulgences? And how toxic are they?

According to the Environmental Working Group (EWG), fabric softeners contain chemicals and fragrances that can cause skin and respiratory irritations.<sup>2</sup> The fragrances alone can come from hundreds of different compounds,<sup>3</sup> many of them potentially toxic.

## **Fabric Softeners Contain Toxicities Such as Phthalates**

Anne Steinemann, Ph.D., professor at the University of Melbourne in Australia and a world expert on environmental pollutants and their health effects,<sup>4</sup> told New Scientist, "Most of our exposure to hazardous pollutants occurs indoors, and a primary source of these pollutants is our everyday consumer products."<sup>5</sup>

According to New Scientist,<sup>6</sup> there are no legal requirements that all the ingredients, including potential toxins, be listed for most of the products we use every day. While the compounds they contain may have been tested individually for toxicity, scientists admit it's hard to say how dangerous they might become when some are mixed.

Conventional fabric softeners work two ways: One is a liquid you pour into the rinse cycle. The other is a sheet you throw in the dryer with your clothes to get the job done.

Both contain compounds that are especially harmful for children. Toxic ingredients can enter your body (and theirs) through the skin and cause serious damage. One of the worst is phthalates, added to emit a fresh (fake) fragrance, about which a University of Illinois article contained the following quote:<sup>7</sup>

*"Exposure to phthalates, a class of chemicals widely used in packaging and consumer products, is known to interfere with normal hormone function and development in human and animal studies. Now researchers have found evidence linking pregnant women's exposure to phthalates to altered cognitive outcomes in their infants."*

The National Institute of Environmental Health Sciences (NIEHS)<sup>8</sup> notes that very few studies have examined the health effects of phthalates on humans, but in lab animals they're linked to numerous reproductive health and developmental problems, including:

Early onset of puberty	Altered male reproductive tract development	Lower testosterone levels in young males
Altered hormone system function	Reproductive and genital defects	Lower sperm count in young males

Additionally, the U.S. Centers for Disease Control and Prevention (CDC) reports that most Americans' blood contains phthalates, especially women, who are most apt to handle cleaning and laundry duties. Further, the "breadth of the danger is not yet understood."<sup>9</sup>

## **Conventional Fabric Softeners and Other Hazardous Pollutants**

According to Steinemann, when limonene and other terpenes become airborne, they can react with ozone to generate elements such as formaldehyde, a carcinogenic substance. Many of these substances can actually alter the hormone balance in animals.<sup>10</sup>

According to Organic Authority:

*"Using a liquid fabric softener? You are pouring these toxic chemicals into the ocean every time you use it. Even worse than liquid fabric softeners are dryer sheets, whose chemicals are heated and then shot into the air for you to breathe into your lungs."*

*That 'fresh-from-the-dryer' smell that fabric softeners impart to your clean load of laundry? Don't breathe it in, if you like your lungs to function. That super floral smell is masking a seriously unhealthy chemical stench."*<sup>11</sup>

## **The Worst, Most Toxic Chemical Offenders**

Chemicals used in fabric softener-manufacturing operations cover your clothes with a fine layer of (toxic) lubrication, which can indeed soften fabrics and render them free of static cling. Then, to mask the smell of the chemicals, they add fragrances.

Between the chemicals and the perfumes if only one toxic ingredient were used, it would be reason enough to opt for natural ingredients, especially for something used as often as fabric softener. Something else to think of, though, is that these chemical substances are not only on your (and your kids') clothes, but on your sheets and pillowcases, towels and washcloths and cloth napkins.

The problem here is that, while a product's ingredient label may list only a handful of ingredients, there may be many others in the product that you don't know about because manufacturers don't have to list them — with perfume components at the top of the no-list offenders.

To help narrow down commercial fabric softener choices, the EWG lists some "greener" products on its website. The safer softeners come in both sheets and liquids.<sup>12</sup>

## **Fresh and Healthy Alternatives to Toxic Fabric Softeners**

If you're in the market for a super cheap fabric softener you can make yourself without all the noxious ingredients, very easy alternatives can be made at home using ingredients found in nearly any supermarket.

Here's a liquid fabric softener recipe from Everyday Roots<sup>13</sup> using items you may already have in your cupboard. Before washing (there's no need to wait for the rinse cycle), toss

one-half cup of this solution into the water for a much healthier alternative to chemical-laced commercial varieties.

### Ingredients

- 2 cups of Epsom salts or coarse sea salt
- 20 to 30 drops essential oil
- 1/2 cup baking soda

### Directions

1. Using a large bowl or pan, mix the essential oils with the Epsom salts first, then stir in the baking soda.
2. Pour the mixture into a container with a tight-fitting lid.

One perk to this easy recipe is that you can always switch out the essential oils. It's also easy to double, and you can use more or less essential oil for a stronger or weaker scent. A few more quick-and-easy fabric-softening ideas include:

- Adding one-half cup of baking soda to your laundry when you wash your clothes. You won't believe how soft they become.
- Mixing 1 cup of distilled white vinegar and one and a half-teaspoons of your favorite essential oils combined in a spray bottle. Shake well; give your wet clothes 10 to 15 spritzes and toss them into the dryer. (Don't worry – the vinegar smell will completely dissipate.)
- Crumple up a ball of aluminum foil and toss it in the dryer with your clothes to help get rid of static cling.<sup>14</sup>
- Put a clean wash cloth with a few drops of essential oil in your dryer to give your clothes a lovely, completely natural aroma when you pull them out.

# Dryer Balls: Easy to Make and All-Natural

Dryer balls are another easy, inexpensive and 100% natural dryer sheet replacement, and they're great for eliminating static cling, usually caused by synthetic fabrics. Best of all, homemade dryer balls can last for years. Using a few drops of essential oils – such as wild orange, peppermint, lavender or a combination – in each ball adds an all-natural fragrance. Besides being free of harmful chemicals,<sup>15</sup> they can:

Cut your drying time in half

Be used safely on cloth  
diapers

Save money on your  
energy bill

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Make you clothes fluffy

Reduce static cling

Be used over and over  
again

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Instructions for making dryer balls are easy. Make several while you're at it, following these simple steps. Remember to add the essential oils at the end. You need:

Recycled 100% wool sweaters (check the tags for fabric content)

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100% wool yarn

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Knee-high nylons or old pantyhose

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Cut the sweaters into scrap pieces and ball them up in your palm to create softball-sized balls

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Take the wool yarn and begin winding it tightly around the ball-shaped scrap pieces, as round as you can make it, until you've covered the entire surface. Cut the yarn and tuck the ends in securely

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Tie a knot in the wool yarn, then drop it into the knee-high nylon sock (or pantyhose, which lets you tie a knot in between each ball), wrap the top with a rubber band and run it through the hot cycles of first your washer, then your dryer. This makes the wool "felt" or fuse together

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Before using them with clothes in your dryer, add a few drops of essential oil to each ball, toss it in with the wet clothes and use it multiple times. If you'd rather purchase dryer balls, look for options made from organic wool. Note: You can get a large ball of wool yarn at your local craft store and save money by getting your sweaters at your [local thrift store](#).

## Sources and References

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- <sup>2</sup> EWG 2017
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- <sup>9</sup> CDC December 23, 2016
- <sup>10</sup> Healthy Holistic Living 2016
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- <sup>13</sup> Everyday Roots 2014
- <sup>14</sup> CNET. November 11, 2015
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