

Laundry Soap Recipe:

Kids, teach your parents to go green and save some green with these cleaners.

Babylonians used soap made from ashes and the oils of cypress sesame seeds as early as 2800 BC. Archeologists found a formula for soap consisting of water, alkali, and cassia oil written on a Babylonian clay tablet around 2200 BC. Ancient Egyptians bathed regularly and combined animal and vegetable oils with alkaline salts to create a soap-like substance and used the soap-like substance in the preparation of wool for weaving.

Soap is a salt of a fatty acid obtained by treating vegetable or animal oils and fats with a strongly alkaline solution. The young daughter of the Daphne, Alabama, Public Works Director uses glycerin, the waste byproduct of making biodiesel from used cooking oil, to form into decorative soaps used in recycling education efforts to the public (http://www.daphneutilities.com/daphne/recycle_bio.htm). Learn how you can make these soaps from <http://www.blackcrownsoap.com/bdglycsoap.html#blackcrown>.

If you are not already brewing biodiesel, here are two simpler ways to make your own laundry soap.

Ten natural cleaners; try these in lieu of high carbon footprint commercial products:

- **Soda** works as a mild abrasive, helping to gently scrub things that need to be scrubbed, but not scratched. Baking soda also removes smelly odors, making it a prime candidate for a bathroom and kitchen cleaner. Baking soda removes stains, and can help soften laundry.
- **Borax** is a laundry booster used around the house. It is actually a natural mineral, but can be an irritant on skin, and shouldn't be ingested. It can be used as a stain remover and a substitute for bleach. Borax may be used to repel insects, but use care around pets and small children. See Caution below.
- **Castile soap** is an oil based soap that can clean almost anything in your home. Diluted liquid castile soap can be used as an all-purpose cleaner and is an excellent degreaser.
- **Cornstarch** can be used as a starching solution for clothing. It absorbs oils and greases, making it a great help in the laundry room or for stains on countertops.
- **Essential oils** add a pleasing scent to homemade cleaning solutions. Be careful when using essential oils; a little goes a long way. Some people are highly sensitivities to essential oil fragrances.
- **Lemons** can be great for scrubbing copper bottom pots. The juice works to clean and shine the pans. Lemon juice is a natural bleach, especially when combined with the sun. Lemon juice is a natural degreaser.

- ❑ **Salt** is an abrasive solution for scrubbing. Use salt to get rid of rust and mildew. Salt also works to help polish copper and silver.
- ❑ **Toothpaste** works as a very mild abrasive, similar to soft scrubbing gel solutions. You can use it to clean silver, to remove stains on white clothing or tennis shoes, and in many other places where a light scrubbing is needed.
- ❑ **Vinegar** can be used as a fabric softener in the rinse cycle of your washing machine. It makes a great all-purpose cleaner and stain remover. Mopping with vinegar is an inexpensive way to keep your floors clean. Vinegar carefully combined with baking soda, makes a great foaming toilet cleaner.
- ❑ Hydrogen peroxide can be used as a disinfectant and is one of the most effective blood stain removers.

Caution:

Borax, also known as sodium borate or sodium tetraborate, occurs naturally and is mined in the Mojave Desert (Boron, California), other US states, in Chile and Tibet. It can also be created synthetically from other boron compounds. The mining side of borax production isn't all that earth friendly, but compared to some other chemical compounds used around the home, it's likely lesser of the many other evils, so it's a "greener" choice.

Borax is relatively safe to use, given its insecticidal properties indicating that it does have some level of toxicity and should therefore be treated with care. Do not ingest or inhale borax. Wear gloves when handling borax to prevent skin irritation for some people.

Eco-friendly homemade laundry soap powder:

You will need:

- ❑ 1 cup powdered borax
- ❑ 1 cup washing soda such as Arm & Hammer (not the same as baking soda)
- ❑ 1 regular-size bar of soap with no added moisturizer (Fels-Naptha Soap, www.felsnaptha.com, works well because it made specifically for laundry.)

Ask your parents to help you grate the soap with the shredder of a food processor.

Replace the shredder with the metal blade, add the Borax and washing soda, and process until all the soap pieces are ground up.

Use about 2 tablespoons in a conventional, top-loading washer. The EnergyStar®, front-loading machines will use about half that. If your water is fairly soft, as it is in Huntsville, try using even less.

A batch should last a family of three for three to four weeks. One user says it costs her about \$20 per year to meet her family's needs. Boxes of borax and washing soda will make much more than one recipe; you need only purchase the bar of soap for the second one.

Liquid laundry soap:

WHNT meteorologist Dan Satterfield swears by this recipe. It's a little harder to make than the powder, but it's still pretty easy, and some folks prefer the liquid.

You will need:

- 1 pure soap bar such as Fels-Naptha or Ivory
- 1 cup of washing soda
- ½ cup of borax
- 4 cups of hot tap water
- 25 to 45 drops of essential oil, a fragrance of your choice. (optional)

Grate the bar of soap and add it to a saucepan with the water. Stir continually over medium low heat until the soap melts completely.

Fill a 5-gallon bucket half full of hot tap water. Add the melted soap, the washing soda, and the borax. Stir the bucket until all of the powder is dissolved. Fill the bucket to the top with more hot water. Stir again and then cover. Add essential oil such as vanilla if desired.

After leaving overnight, ladle into reused containers such as the old plastic laundry detergent bottles you used to buy—reuse is better than recycling.

For top-load machine: use 5/8 cup per load; use half that or less for EnergyStar®, front-loading.
Yield: approximately 180 loads

One user reported a cost of about \$0.30 per gallon compared to \$8.00 for a gallon of the commercial stuff, and it's more "green." You have reduced your carbon footprint by avoiding processing, packaging, and hauling the commercial liquids from faraway places.

