

Basic Soap Making

Putting Chemistry to Work in Your Kitchen

By: Moriah

Making handmade soap is a skill I'd long wanted to learn. For years I'd poured over soapmaking books, walking through the steps time after time, but something always held me back. Oh I had plenty of excuses: I had a small child and feared spilling lye on her, would it explode all over my kitchen, etc. Finally last year I just got up my nerve did it. While it was stressful and I looked like an astronaut with yellow rubber gloves up to my elbows and safety glasses on over my regular glasses - I did it! And it's not all that hard. Honest.

Visit any handmade soap booth at your local craft show and you'll see a wide variety of soaps in many different scents and colors. These usually run \$4.50 and up for a small bar. That's wonderful, but a nice basic soap can easily be made with ingredients purchased at your local Super Wal-Mart - lye, vegetable shortening, coconut oil, and olive oil. Add a little water to the mix and you have soap.

The most important things to remember while making soap are:

1. Safety first! Lye is an extremely caustic substance and can do real harm, so treat it with respect. No children or pets underfoot! While working with the lye, make certain you have a window open nearby to keep the fresh air flowing as the fumes can be very strong. Always wear protective gloves and eyewear.
2. All measurements are by weight, not volume. Set out your ingredients before you begin the process, double-checking to make certain the weights are correct. This is not a time for haphazardness - if the amounts are wrong, your soap will not turn out right.
3. NEVER pour water into lye, always pour lye into water. Getting this wrong could create a lye volcano in your kitchen. Not a good thing.
4. Always keep vinegar close by in case you get lye on your skin. If you do get lye on your skin, it will not burn immediately but will make the surface of your skin very smooth and silky. Be watchful at all times and if you do get splashed, immediately pour vinegar over the area. Its better to just be extra careful and not splash yourself in the first place.

RECIPE

The basic recipe I started out with is found on the Millers Soap website (<http://www.millersoap.com/soapallveg.html#Rachael1>):

48oz Crisco shortening (3# can)

21 oz Olive oil

18 oz Coconut oil (Wal-Mart carries the LuAnn brand - look in the oils section for a white plastic container about the size/shape of a jar of peanut butter)

28 oz cold water

12 oz lye crystals (Red Devil is the usual brand, but make sure its 100% lye or Sodium Hydroxide, don't just use anything labeled "drain cleaner")

EQUIPMENT

Goggles or safety glasses

Rubber gloves

Scale (digital is best, but I found my non-digital in the kitchen department at Wal-Mart for \$12 - it works very well as long as I'm careful with the measuring)

Enamel or plastic bowl for mixing

4 qt stainless steel or enamel pan (I use a stainless stockpot I got at Big Lots for \$4)

2 long handled heavy plastic or silicone spoons/spatulas

Sturdy thermometer

Heavy freezer paper

Masking tape

Mold - try a heavy Rubbermaid dishpan, my mold of choice. Should be big enough for about 24 3"x 1" bars

Piece of cardboard large enough to cover the top of your mold

Some towels or an old blanket

Sharp paring knife

Stick blender (very helpful with the stirring, I got mine for \$15 at Bed, Bath & Beyond)

METHOD

Lay out all of your equipment and weigh out the oils, water and lye. Use the wax paper to completely line the interior of your mold, taping down any folds with masking tape to make the surfaces as smooth as possible.

Put on your safety glasses and gloves. Pour the water into your mixing bowl. Slowly add the lye crystals to the water, stirring slowly with your long handled spoon until dissolved. The chemical reaction with the lye will heat the water to about 160 degrees and the resulting fumes are strong, so hold your breath for the first few moments. If the fumes become overwhelming, step out into fresh air for a few moments. Upon returning, continue stirring until the lye is completely dissolved. Now set aside until the temperature comes down to around 100 degrees. Remember this is very hot and caustic, so set the bowl away from the edge of the counter where it will not be disturbed.

While the lye is cooling, its time to deal with your fats. In your saucepan or stockpot, over low heat, melt the coconut oil and shortening. Once these are melted, add the olive oil and stir well, completely incorporating all of the fats. Remove from heat and wait for the temp to come down to about 100 degrees. The lye solution and fats need to be within 10 degrees of each other.

Once both have cooled, it is time to incorporate the two mixtures. Put your safety gear back on. With your stick blender (or your long handled spoon if you're stirring by hand), begin stirring the fat mixture while you slowly pour in the lye solution. It is important to stir steadily, covering all areas of the pot. I do figure eights all around the inside of the pot. Be careful not to splatter yourself with the lye/fat mixture as it will burn you (see above re vinegar). This is like making a white sauce, just keep stirring as the mixture slowly thickens. It may take up to 25 minutes when stirring by hand, as little as 5-10 minutes with the stick blender. Test the mixture periodically to see if a drizzle of soap laid atop the rest of the mixture will leave a faint pattern before fading - this is called "trace" and means the soap is ready to pour into the mold. This mixture will be smooth with no lumps.

Once you have reached trace, stop mixing and quickly pour the soap into your prepared mold. If you find any residue on the pan do not attempt to incorporate it into the rest of your soap - leave it in the pan. Fill your pot with warm water, put your spoon and any other bowls/utensils in it, then set in your sink for washing later.

Cover the filled mold with the piece of cardboard, then cover that with the towels or old blanket. Let it sit - no peeking! - for 24 hours. Then uncover the mold and set it away from drafts for another 7 days or until it is firm enough to cut. Then unmold the soap and cut it into bars of the desired size (3" x 1" is an easy to use size). Place the bars of soap in an area with good ventilation for 4 weeks. Turn them once halfway through to allow for even curing.

After that, your soap is ready to use!

WARNING!!

Soapmaking is very addictive! Once you get the basic method down, tweaking your recipe to suit your specific needs can be loads of fun. It's very tempting to get caught up in colors and

fragrance and luxurious oils and texturizing additives. So venture into it at your own risk - and if you do find yourself thoroughly seduced, at least its good clean fun.