

Handmade Soap

Presented by Sherry Ninneman, A Misty Dimness (AMD) Soap

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Necessary Tools & Supplies:

Scale for weighing ingredients (not a postal scale)

Stickblender or Immersion Blender

Safety Glasses

Latex or Nitrile Gloves

Plastic bowls (plastic code #5) – I got mine at Dollar Tree

Plastic measuring cups (plastic code #5) – I also got these at Dollar Tree

Silicone spatulas – (I like the ones from Dollar Tree for mixing lye, but I like one piece spatulas from Shopko for mixing soap batter and oils because they don't come apart).

Molds – wax juice or milk cartons, Pringles can, reinforced boxes lined with freezer paper or plastic bag

Cling Wrap

Olive Oil

Great Value Shortening

Coconut Oil

Castor Oil (find it in the pharmacy aisle with digestive aids)

Distilled Water

Sodium Hydroxide:

You may find this at Hardware stores in the drain cleaner aisle. It should be in flake or pellet form, 100% Sodium Hydroxide and white. I haven't had luck finding it in Watertown, so I recommend these sources:

1. <http://www.essentialdepot.com/category/sodium-hydroxide-components.html>
2. <http://www.wholesalesuppliesplus.com/products/sodium-hydroxide-flakes.aspx>
3. <https://www.brambleberry.com/sodium-hydroxide-lye-p3037.aspx>

Optional Tools & Supplies:

Table covering

Apron

Soap Safe Colors and Fragrances

Colors and fragrances sold at Hobby Lobby, Michaels, etc. are not meant lye based soaps and will give unpleasant results. Look for colors and fragrances that are either noted as "Soap Safe" or better "Ph stable". All three of the lye sources listed above also sell soap safe fragrances, sources 2 & 3 also sell soap safe colors. All fragrances or essential oils have a safe usage rate. Please be aware of the safe usage rate of what you are using.

Paper towels or other cleaning rags.

Instructions

1. **Measure oils** to amounts in recipe by placing measuring cup on scale and spooning or pouring oil into cup. Make sure to TARE after placing the measuring cup (scale will read ZERO) and before adding oils so that only the oil weight is counted. Do this for each oil. Place all oils into large plastic bowl. If you cannot be exact, it is better to be slightly over. Break up any large chunks into smaller pieces. [Optional: add soap safe fragrance or essential oils]
2. **Measure water** to amounts in recipe by placing measuring cup on scale and pouring into cup. Make sure to TARE after placing the measuring cup (scale will read ZERO) and before adding water so that only the water weight is counted. If you cannot be exact, it is better to be slightly over. Make sure there is enough room in the cup – I like to use a cup that is 2-3x bigger than what I need.
YOU MUST HAVE GOGGLES AND GLOVES ON FOR THE REMAINING STEPS!
3. **Measure sodium hydroxide** In separate measuring cup, measure sodium hydroxide to amounts in recipe by placing measuring cup on scale and pouring slowly into cup. Make sure to TARE after placing the measuring cup (scale will read ZERO) and before adding water so that only the water weight is counted. If you cannot be exact, it is better to be slightly *under*.
4. **Make lye solution** Pour sodium hydroxide into water (helpful tip is to remember “snow falls on the lake”) to create lye solution. Never pour water into sodium hydroxide as it may result in splashing which may cause burns. Stir with spatula until sodium hydroxide is completely dissolved. The lye solution will be cloudy, begin to heat up, and give off fumes. If you find the fumes overwhelming, doing this under a stove exhaust fan can be helpful.
5. **Combine lye solution and oils** When the lye solution is clear (about 2 minutes), carefully pour into the bowl with your oils. With a spatula gently stir the oils and lye solution to melt the hard oils. Continue stirring until oils are completely melted or only a few small pieces remain.
6. **Mixing with stick blender** Blend mixture with stick blender by putting blender all the way to bottom of bowl, gently tap to release air bubbles, and turn on. Alternate between short bursts with the stick blender (5 seconds) and hand stirring with the stick blender (10-15 seconds). Mixture is properly blended when the mixture does not have oily streaks and a drippings from a spatula will rest on top of the mixture in the bowl. It will have the consistency of a thin pancake batter.
7. **Optional Steps for coloring:** Separate mixture into measuring cups and add color. Colors can be pre-mixed with water or a bit of oil to make mixing easier. Mix colors into soap well with a spatula, spoon or stickblender (be careful not to overblend so that the mixture is too thick).
8. **Pour mixture into mold.** Cover with cling wrap. You may also cover with a box or piece of cardboard and a folded towel, and place in an out of the way place. Soap is ready to cut when it is firm, similar to a block of cheese, and does not dent when pushed with your thumb. Typically in 18-24 hours. Soap may be cut with a cheese cutter, a sharp knife or thick piece of wire.
9. **Cure cut soap** for 4-6 weeks in a cool dry place out of direct sunlight. This soap will keep for approximately 12 months. If soap begins to discolor with orange-brown spots, it is a sign the soap has gone bad. It is best to toss the soap when it begins to discolor.

A note regarding the recipe:

There are many oils available in supermarkets such as avocado oil, sweet almond oil, lard, sunflower oil, etc. Every oil has its own SAP value which determines how much lye is needed to turn that oil into soap. If you add or replace any of the oils in this recipe, you will need to run the new recipe through a soap calculator. My personal favorite can be found at: <http://soapcalc.net/calc/SoapCalcWP.asp>

If you have any problems or questions, please feel free to reach out to me! I am always happy to help out someone wanting to make their own soap. My contact info is on the first page.