My Soap Making Experience

This is how I made my first batch of soap. I used a recipe from <u>http://www.millersoap.com/</u>. It is an all vegetable oil soap, no animal fats. It is their Canolive II recipe. It is a cold process soap; that is no high temperature cooking is required. I made a half batch. Here's the recipe:

Besides the ingredients listed below you need an accurate scale and a couple of good thermometers that will measure in the 95 to 110 F range.

It is important to note that the oils are proportioned by **weight**, as is the lye. The water can be measured by volume though.

Full recipe	half recipe
36 ounces canola oil, by weight	18
36 ounces olive oil, by weight	18
16 ounces coconut oil, by weight	8
24 ounces cold water, by volume	12
12 ounces lye crystals, by weight	6

You need a good digital scale. If using ounces and pounds. the scale is best if it measure in decimals rather than 1/8 fractions as the smallest unit. Or possibly better yet, convert everything to metric and use grams for weight and CC for volume. If the proportions are not accurate the soap could end up with too much or too little lye. Either is not good. When the oils and lye are proportioned properly all the lye is consumed in the process. The soap will be mild. If there is too much oil... well, the soap will be too oily. If there is too much lye, well, that is where lye soap got the bad reputation for being harsh on the skin.

If you split a recipe the need for accuracy in weighing becomes more important.

Note that different oils are different. You can not necessarily replace one oil with another type. They have different SAP values. The process of the lye combining with the oil is known as saponification.

First get everything you need. I found lye at my true Value hardware, in the plumbing dept, sold as drain cleaner. Lye is sodium hydroxide. In BCanada and the UK I believe it is called caustic soda. Be warned not all drain cleaners are 100% lye.

The lye which is powder or crystals is first dissolved in COLD water. Lye can be dangerous handle. Dry lye on the skin can burn because the skin may have enough moisture to activate the lye. Rubber gloves and eye protection is advised. Mix the lye and water outside. The fumes are not good for you to breath or have in your face. Always add the lye to the cold water while stirring. Never add water to

dry lye; it will spatter all over from the great heat released from the chemical reaction. Use wood or stainless steel or some plastics for the stirring spoon. Do not use aluminum at all at any point in the process. I mixed in a Pyrex glass measuring cup. The mixture gets Hot when the lye is mixed into the water. Be careful. The lye water mix should be cooled to about 95 F before use. That makes winter an ideal soap making time.

Coconut oil arrives as a solid. I found mine at Walmart on the shelf above lard next to the cooking oild section. Weigh out the quantity carefully, place in the pot (I used stainless steel) and melt over low heat. Weigh and add the oils to the melted coconut oil. The oil should be at about 110 F maximum.

Now the lye water is added to the oil mix while stirring. Place the lye water container in the sink and run copious amounts of water through it. Stir the oil/lye mix so as to not introduce air bubbles. I did the stirring on the range top just in case I needed to apply a small amount of heat.

The stirring with a spoon can take an hour. However, a stick blender amazingly speeds up the process. It is best to run the stick blender in spurts, maybe 15 seconds or so and then continue mixing using the blender turned off, as a stirring utensil. If the blender is run too long it may overheat in the thickening mixture. After about ten minutes the mix should be a bit thicker, like thin pudding. Dribbles of the mix back in the pot should not immediately smooth out. The only danger of over mixing is it may get too thick to easily be placed in the mold.

I used an $8 \times 8 \times 2$ inch glass baking dish for the mold. It holds a half recipe well. Downside is the curved side to bottom which gives some odd shaped cut bars.

The range oven should be slightly warmed beforehand, but be sure the oven is turned off before you continue. A pan of warm water is placed in the warm oven along with the soap in the mold. The door is shut and the oven light left ON. The oven light adds enough warmth to aid the soap making process. Do not open the oven (or use it) for 24 hours. Using the oven saves the trouble of wrapping the soap mold in blankets or towels.

24 hours later remove the soap mold from the oven. I lined the mold with plastic wrap try to make separation easier. It worked well. Once the soap block is out of the mold it is solid enough to hold its shape but still easy to cut. Cut to whatever bar size is desired. Place the bars on a rach so they do not touch. Ideally the bars should sir dry and cure for 4 weeks.

Lots more info on www.millersoap.com

There is also a soap makers forum. Do a Google.