Rhonda Hetzel’s Soap Making Notes

EQUIPMENT

* Stainless steel saucepan
* Wooden or plastic spoon
* Scales - most soap ingredients are measured by weight, not volume
* Jug - for holding oils
* Measuring jug - for measuring water. It's ok to measure the water by volume
* Thermometer - you can use either a milk or candy thermometer
* Stick blender (optional)
* Newspaper to cover your work area

DON'T use any aluminium pots or spoons. You may use stainless steel or cast iron and your spoon may be of steel, wood or plastic.  
  
RECIPE The recipe may change every time you make soap but the method of making it remains the same. This is the recipe I use now:

1. 450 mls rain water, spring water or distilled water
2. 172 grams caustic soda/lye
3. 1000 grams olive oil
4. 250 grams copha or coconut oil

Temperature conversion calculator <http://www.onlineconversion.com/temperature.htm>

**WARNING**

If you are new to soap making, be warned, it should never be attempted when children or animals are around. The lye (caustic soda) you will use, burns, and if you spill it on skin you need to wash it off immediately under running water or vinegar. If you drop it on the floor or bench top, wipe it up straight away as it will burn a hole. When you mix the lye with water, even though it's not on the stove, it will heat up considerably and burn if you drop any on yourself or splash it in your eyes. There are also fumes. When you mix the lye with the water, fumes will come off it. Make sure you mix your lye in a well ventilated room.

Many soap makers wear latex gloves, goggles and a mask. I don't as I know what I'm doing and I'm very careful. Please use these safeguards while you're learning to make soap. When you're experienced, you might be able to dispense with them. Are you still with me after that warning? Soap making is a simple process that is made difficult by using lye (caustic soda). There is absolutely NO WAY to make soap from scratch without using lye. If you make sure you're alone when making soap, if you have all your ingredients measured out and have a clean and clear work area, you shouldn't have any problems. The entire process should take about 30 minutes. BTW, the process of soapmaking - saponification - neutralises the lye and by the time the soap is cured, no lye remains in the soap.

**METHOD**

* Lay out the newspaper over your work area.
* Grease your moulds.
* Put on your safety gear.
* Measure and weigh all your ingredients.
* Weigh all your oils and place them in a saucepan.
* Measure out the water and leave it in your measuring jug.
* Measure out the lye into a small bowl.
* Clip the thermometer onto the side of the saucepan and place on low heat on the stove.
* Slowly heat the oils to 50 degrees Celsius (122 F).
* With the water already in the jug, carefully pour in the lye and stir gently until fully dissolved. Stand back a bit as there will be fumes coming up from this mix and it will heat up.
* Now you need to have the oil at 50C and the lye at 50C (122F). When they're the same temperature, carefully pour the lye water into the oils and avoid splashing it.
* Start mixing. You can either use a spoon and stir for about 20 minutes or use a stick blender and mix for about 5 - 10 minutes, making sure your blender doesn't overheat. I use an old Mixmaster (KitchenAid) as it has a very low setting that doesn't splatter. It gently stirs and reaches trace within 5 or 6 minutes. Don't use a hand beater and it splashes too much and the soap is still caustic at this stage.

**TRACE**

Trace is the sign you look for that the soap has become stable and is ready to be poured into a mould. Before you reach trace, the surface of the mixture will be smooth. When you reach trace, slight ripples will form on the surface and remain there. The mix should be thick, but pourable.

If you're going to add fragrance, add it when you reach trace and give it a good mix. Then pour the mixture into the greased mould. I use a resin cake form that I bought for $2 at the dollar shop. You can also use plastic ice block trays, milk cartons or any plastic shape. Make sure you grease it - I use cooking spray, and if you're using a milk carton, make sure it's absolutely clean.

If you want to colour your soap you should research this yourself as I've never coloured my soap. Food colouring is unstable and not considered suitable, you'll need to buy soap dye or use natural powders like turmeric, cinnamon or cocoa.  
  
Once the soap is in the mould, cover it with a towel so it cools down slowly.

The next morning, or about 15 hours later, release the soap from the mould and cut it into whatever shape you desire.

I add nothing to my soaps, but I do stamp them with a plain old rubber stamp. And I don't fiddle with the shape, I just cut them into blocks with a sharp knife. I like my soap to look handmade, but many soap makers fashion their soaps to look very professional and store bought. You do what you want to do.

Place the cakes of soap on a drying rack in an area they can stay in for a couple of weeks. Turn the soap over every day to allow it to dry out evenly. I cure my soaps for about six weeks before using them. The drier they are when you use them, the longer they last. You could use your soap after a week or so, but when it gets wet it will go soft and won't last long. It's better to cure them for a few weeks. This batch made 12 hefty blocks of soap.

ADDITION: I forgot to add something about soap calculators. When you want to try a new recipe with different oils, you'll need to run the recipe through a soap calculator to give you the correct ratios of oils, water and lye. This is the one I use: <http://www.snowdriftfarm.com/soapcalculator.htm>. Just fill in the weight of the oil you'll use and it will calculate your lye and water for you (for the recipe above we used 1.5 litres). This will give you the exact amount of lye and water you need to add. Then make the soap as above.

**Laundry Liquid**

Makes 10 litres  
You may add any essential oil of your choice to these homemade cleaners. Oils like tea tree, eucalyptus, lavender or rose are ideal but are not an essential ingredient. They are not necessary to the recipe but do not detract from the effectiveness by adding them. Use essential oil and not a fragrant oil.

**Ingredients**  
1½ litres water

1 bar Sunlight or generic laundry soap or any similar pure laundry soap, grated on a cheese grater OR 1 cup of Lux flakes

½ cup washing soda – NOT baking or bicarb soda

½ cup borax

**Tools**

Saucepan  
10 litre bucket  
Slotted spoon or wooden spoon for mixing  
Into a medium sized saucepan add 1½ litres of water and the soap. Over a medium heat, stir this until it is completely dissolved. Make sure the soap dissolves properly or the mixture will separate when cold.

Add the washing soda and borax. Stir until thickened, and remove from heat.

Pour this mixture into your 9-10 litre bucket then fill the bucket with hot water from the tap. Stir to combine all the ingredients. The laundry liquid will thicken up more as it cools. When cool, store in a plastic container. I use one of those 10 litre flat plastic box containers with a lid. Use ¼ cup of mixture per load or monitor to see what works well for you. I keep a ¼ cup measuring scoop in the box to measure the mixture into the washing machine.

This detergent will not make suds when you wash as it does not contain the chemicals that supermarket detergents add to make suds. You do not need suds to wash your clothes or for the detergent to be effective. The agitation of the washing machine does most of the washing. Additives loosen the dirt and grease. If you use the greywater from your laundry on your garden, leave out the borax.

All these washing aids are suitable for top loaders AND front loaders. I have been using them in my front loader machines for years with no ill effects.