

All-Vegetable Soaps and the Stick Blender

For more info on Internet, go to: <http://millerssoap.com/soapallveg.html>

Life in the FAST lane! ...Using a "Stick" Blender

Since I've done more reading about soapmaking on the Internet, I've heard of using a stick blender for mixing soap instead of stirring by hand. This was said to speed up the saponification process and save lots of time. When I realized that I actually owned a "stick" blender that I hardly ever use except for pureeing carrot soup, I was thrilled to try it! At the time of this writing (December 4, 1998) I've used it to make eight batches of soap (mostly all-vegetable). Each veggie batch has traced within 5 minutes or less and the batch with lard took only a few minutes longer with a spoon to finish stirring! I have heard from a couple of people that they don't use the stick blender until they've already stirred in the lye for a bit with a spoon, but I just used it from the start, and instead of pouring the lye in a slow steady stream, I dump it in rather quickly while swirling it all around with the blender. If you pour it in slowly, the soap could be at trace before you have time to put in the fragrance oils!

On top of drastically cutting down the trace time, using the hand held blender makes a soap that is a lot less prone to separation problems! Quite frankly, I would be surprised to see any batch separate that is mixed this way. You are more likely to have a problem with it setting up too quickly on you! All the batches were smooth and easy to cut with no breaking whatsoever. I suspect that mixing this way probably cuts down on the curing time as well, but I would still wait four weeks before use to be sure. I don't think I'll ever go back to the old way of standing in front of the stove stirring away!

If you are new to soapmaking and don't know what "trace" looks like yet, I would suggest you do it the traditional way with a spoon or hand mixer first (the usual kind). After you get used to how soap changes and recognize the difference between early trace and when you need to go into panic mode (!!!), then you will probably enjoy the time-saving qualities of using a stick blender. I bought mine at Costco in 1990 for about \$25. Another soaper, Michelle, told me that they now cost \$10-\$20 at her local K-Mart and Walmart Stores.

Remember, when using the stick blender, you can switch to a spoon at any time to slow down the saponification process. Once the soap starts to get smooth and glossy (light trace), you can turn off the stick blender and use it like a spoon to blend in your additives. Then I turn it back on and whip it all around a bit more before pouring. Sometimes the coloring agents, organics or oils will clump a bit when added and it does a great job of making it all smooth. Just don't take too long to get it into the molds when trace happens! Another tip...if you are mixing in a wide shallow container, you will run a higher risk of incorporating air into your soap with the blender. It works better if you mix your soap in a container that is taller than wide, so you get some depth and can get the blender way below the surface for most of the stirring. I periodically bring it to a shallower depth in order to pull in the soap on top, but don't raise it enough to pull air.

Something that helps if you are going to use the stick blender is to use mid-lower temperatures before blending... in the 90-100 degree range. This gives you a greater latitude when working with the blender and your soap will not trace quite as quickly. Sounds silly, but you will appreciate it taking longer...unlike when you are stirring with a spoon and want the shortest trace time possible!

Cleaning: I find the easiest way to clean the stick blender (after wiping off the excess globs of soap as much as possible with a paper towel...when it is UNPLUGGED) is to fill the soapmaking pot above the halfway point with hot soapy water (this is wiped out first with paper towels also and those are tossed in the garbage). Then I blend and mix it around with the stick blender like you would a batch of soap. Doing this for a minute does a great job of cleaning out the inside parts of the blender...around the blade and under the guard. It's easy to wash the outside the rest of the way in the sink (I can't submerge mine).

I AM CONVERTED! :-)

Here's a great idea from Pat Prenty, who has contributed quite a bit to the "Soapy Success" pages:

"When I make soap I add the lye to the water, then when all is ready I add the lye to the fats and stir by hand for about 20-30 min.... then, when I can't stand it anymore, I whip out the stick blender. Sometimes I will separate some of the soap and blend it until a light trace, and add fragrance oil and dried herbs (or what ever strikes my fancy) and pour into molds. Then I pour more out and blend it, add a different fragrance oil and what ever. Meanwhile, my husband is reading his book and absently swishing the big pot of soap. It is really too much... I love being in control of the soap. "

My Soapmaking Routine Using the Stick Blender

1. Take out all the soapmaking utensils, premeasure any herbs or additives and place near the soapmaking area (my stove).
2. Dissolve the can of lye by stirring it into the determined amount of cold water. I am now doing this in a one quart size Pyrex glass measuring cup. This is placed on the stove top under the fan while mixing.
3. Weigh out the hard fats (palm, coconut, etc.) in the soapmaking pan and sometimes part of the liquid oils. I leave part of it out to be added after melting the harder fats. Any wax candle color, crayon or beeswax goes in at this point also.
4. While the fats are melting I line my mold with freezer paper, if I haven't done it already.
5. Melt the above fats on a low setting on the stove, stirring periodically. After they have melted, I put the pot back on the scale (on top of a heat resistant pad) and measure in the remaining room temperature oil (usually between 24 and 32 ounces). This cools it off faster.
6. When the temperature of the fats is close to 110 degrees, I speed the cooling of the lye solution if necessary by setting the Pyrex cup in a sink of cold water (halfway up the side). I stir the water around and watch the thermometer until it drops to the temperature I want. The thermometer and stirring spoon are rinsed of lye water and placed in the sink to await washing.
7. It's time to start up the blending. I turn on the stick blender and pour the lye solution quickly into the fat (while I'm blending I set this cup into the sink and overrun it with water to rinse and wait for washing). The soap is mixed until it starts to smooth out and glisten. Sometimes, I'll turn on the burner under the pot for just a minute to warm the soap slightly if it's looking grainy to start.
8. Periodically, I turn off the stick blender and use it as if it were a spoon to stir the soap. This works well on mine since the guard does an effective stirring job. I alternate blending with it on and stirring with it off until it starts to thicken slightly (the surface appearance will change and develop some dullness...patterns can be seen in the wake of the blender).
9. It's time to stir in the additives, fragrance or essential oils. This is better done with the blender off, but I turn it on briefly after stirring to make sure the fragrance/essential oils are smooth and completely incorporated. Sometimes they will clump slightly and I want to break those up. Any other ingredients can be added at light trace also, like superfatting oils that weren't put in at the start, natural colorants like paprika, herbs, etc. Save the fragrance for last in case you get one of those fragrance oils that accelerates trace and forces you to pour quickly! =:-O
10. When the soap is getting slightly thicker but not to the pudding stage yet, I pour it into the mold. If you are doing confetti soap are adding heavy substances to your soap, you will wait for medium thick pudding to pour. Use a spatula to clean off the outside and guard of the stick blender first (inside too the best you can...unplug it first if there is danger of bumping the switch while cleaning) and then use it to scrape all the soap out of the pan into the mold. It also works well for marbling if you're doing that.

11. Set the box with poured soap into another box and cover that with a third box which fits over the bottom one. I will open this at gel stage and allow some heat to escape before I cover it back up for the long haul (of course, I peek!). When the soap shows signs of cooling down by becoming opaque at the edges, it's time to put the cover back on. A heavy towel can go over all this if the room is cool.

12. Wipe out the pan, wipe off the utensils and outside of the stick blender (and as much around the blade as you can safely get) with paper towels and dump those in the garbage. Fill the soapmaking pan half to 2/3rds with hot soapy water, set back on the stove and stick blend the water until the inside of the blender is completely cleaned (about a minute). The water will look like skim milk by the time you're done. The water is poured out of the pan and everything is washed with hot soapy water, rinsed and dried until next time.

All this can be done in the space of ONE HOUR.

All-Vegetable Recipes

Basic All Vegetable Soap

28 ounces of coconut oil (2 jars)
24 ounces of olive oil (the cheapest and lightest in color)
30 ounces of vegetable shortening (the cheapest, and purest you can find)
12 ounces of lye (one standard can of Lewis Red Devil)
32 oz. cold water (4 cups)
1.5 - 4 ounces essential and/or fragrance oil depending on strength and your nose, if soap is not intended for remelting

Temps can range from 95-120 degrees.

*Rachael's "Tried and True" Recipe (Thanks! to Rachael Levitan)

48 ounces Crisco (a 3-pound can)
21 ounces Soybean Oil (or Olive, Canola, or a blend of these)
18 ounces Coconut Oil
28 ounces of cold water
12 ounces lye crystals

Temperatures: 100 degrees

Trace by hand should be in about 20 minutes. Cure about 24-48 hours before cutting. *(I've done this with the stick blender and trace happens in about 1 minute! If you want to mix soap that way, this is probably not the recipe to use...unless you're quick! ...Kathy)*

A couple of people on the Latherings Board raved about this basic combination, so I thought I'd post it for those of you who have trouble finding coconut or palm oil. I haven't tried it yet. Let me know if you try it and like it!

All-Vegetable, No Coconut or Palm

56 ounces olive oil
30 ounces vegetable shortening
9 ounces castor oil
12 ounces lye crystals
28 ounces cold water
2 T. salt dissolved in a small amount of hot water and added to lye solution

The salt was felt to be an important part of this recipe, although I imagine you'd have nice, but softer soap without it. I would keep it in unless you try it that way and don't like it as well as soap without the salt.

Canolive II -"The Sequel" (Kathy Miller)

36 ounces canola oil (or you may substitute sweet almond, corn, peanut oil, or any blend of those oils)
16 ounces coconut oil
36 ounces olive oil
24 ounces cold water
12 ounces lye crystals
Temperatures: 90-100 degrees

This soap has a very nice texture after 24 hours (cutting stage). I used the stick blender, so don't know how it will be with hand stirring. If you are not comfortable with the low water content, you could bump it up to 28 or 32 ounces, but I like the firmer bars that don't take as long to harden up.

"Almond Joy" ...Chocolate Almond Swirl (Kathy Miller)

16 oz. palm oil
14 oz. coconut oil
52 oz. olive oil
6 ounces cocoa butter
32 oz. cold water (4 cups)
12 oz. lye crystals

Add at trace:

1 ounce Bitter Almond fragrance oil (Sweet Cakes)
2-3 T. cocoa powder blended into about 1/4 of the soap at trace (after pouring 3/4 of it into mold)

Temperature: 95-100 degrees

Instructions as usual. Add the Bitter Almond oil at early trace and pour 3/4 of the soap into the mold/s. Mix the cocoa powder quickly into the remaining soap (stick blender makes this easy) and drizzle it over the top of the white soap in a back and forth fashion. Take a butter knife and gently run it back and forth to gently swirl the two colors together (you decide when it looks pretty enough to stop). A note on adding the cocoa. You could probably blend the powder with a small amount of the soap before stirring it into the rest. When I did it, I added some olive oil to the cocoa, but had some oil ooze out of the darker soap after it set overnight, so think it was too much.

This soap was a bit ridged on top where it was swirled as it got thick, but I left that on also. It looks kind of neat and really smells strong! If you pour your soap at light trace, this probably won't happen. I put in more Bitter Almond than I listed in the ingredients above and it was a little too much for my tastes, but will last longer. One ounce should be okay. The soap is very hard, cleansing, and lathers well. People who are into almond and chocolate really get excited over these bars! :-)

The next recipe has a wonderful texture and smoothness... you can buy small bottles of sweet almond oil at most grocery stores I did this one with peach scent, but you can use any scent and coloring you want on the base recipe... it's a nice one.

"Peachy" with Almond Oil (Kathy Miller)

32 oz. soybean oil
16 oz. palm oil
16 oz. olive oil
14 oz. coconut oil
8.5 oz. almond oil (that's how it was bottled)
28 oz. cold water
12 oz. lye crystals

Temps around 90-110 degrees

Added at light trace:

2 oz. "Peach Deluxe" FO from Sweet Cakes
1 tsp. Bitter Almond FO from Sweet Cakes
1 T. paprika (for color)

Now that I have some more palm oil, I'll be experimenting with using it in more recipes. The expense of ordering it is similar to my cost of buying olive oil at our local Costco store, so I don't mind using it.. keeping that in mind. I prefer to use it in lesser quantities though...a pound in a batch can make quite an impact on the finished bar. The soybean in this recipe cuts down on the expense and it offers emollient qualities and stable lathering. It would not make a good bar of soap if used by itself, but is very nice in combination with more saturated fats. It's also very easily and inexpensively bought in the U.S. If you live in another country, you may want to find some other common oil with a similar sap value to replace it.

White Chocolate (Kathy Miller)

40 ounces soybean oil
16 ounces olive oil
16 ounces coconut oil
8 ounces palm oil
8 ounces cocoa butter (food grade...the GOOD smelling stuff!)
28-32 ounces cold water
12 ounces lye crystals
1 oz. fragrance or essential oil if desired at trace, such as peppermint, almond, or non-discoloring vanilla if you'd like. If you use regular vanilla or chocolate fragrance oil, it will turn the soap brown...which is fine. It just won't be "white" chocolate anymore!

Temps 100-110 degrees

If you use good smelling cocoa butter, this will smell nice on its own, even without added fragrance oil. The cocoa butter gives the lather a really nice creamy feel and it's SO gentle on the skin. Since cocoa butter costs more than the other ingredients, this is kind of a luxury soap at my house!

This is a firmer bar that is higher in firm fats... keeps better during the summer months?

***Sudsy All-Vegetable**

24 oz. coconut oil
24 oz. olive oil
20 ounces soybean or canola oil (or blend?)
16 oz. palm oil
12 oz. lye crystals
24--26 oz. cold water

Temperatures around 110 degrees.

This really has a nice silky lather... a hard bar.

All-Vegetable Soap using 14 oz. jar of coconut

40 oz. olive oil
24 oz. soybean oil
14 oz. coconut oil
10 oz. palm oil
12 oz. lye crystals
26 oz. cold water

Temperatures around 110 degrees.

Soap Classic

24 oz. coconut oil
40 oz. olive oil (*For harder soap, may substitute 2 oz. cocoa butter for 2 oz. of olive oil*)
18 oz. palm oil
12 oz. lye crystals
24 - 28 oz. cold water
Temperature around 110 degrees.

Castile Type Soaps (lots of Olive Oil)

Take note that I did these Castile recipes with a stick blender. If you are hand stirring a recipe like these with such a high percentage of olive oil, it could take a couple of DAYS to trace, instead of a couple of minutes!

***Favorite Castile (From the Soap Newbies Page)**

78 oz. olive oil
6 oz. coconut oil
6 oz. palm oil
24 oz. cold water (if you want to up that, you can...soap will be softer after 24 hours. Don't exceed 32 ounces.)
12 oz. lye crystals

Oils at 140 degrees, Lye Solution at 110 degrees.

This basic castile recipe was taken from the Soap Newbies Member Recipes page and was submitted by Nancy. I upped the olive oil a bit to accommodate 12 oz. of lye. I have to say that it is my favorite all-vegetable recipe and the soap is nice and smooth and hard without any excess oil seepage or stickiness. It's also easy for me as ingredients go (except the palm oil, but it doesn't use very much). When using a stick blender, it does set up rather quickly after it traces so you need to pour it at the early trace stage and not waste any time.

This is a great base recipe for all kinds of soaps! I loved the "Favorite Castile" recipe posted by Nancy on The Soap Newbies page but wanted more lather in the finished bar and a little less of the slippery quality, so I upped the coconut and palm oils in this version. I keep coming back to this recipe...it's a wonderful hard bar, lathers well but is still mild.

"Favorite Castile" II Soap (Kathy Miller)

24-28 oz. cold water (depending on how firm you want the bars in 24 hours)
12 oz. lye crystals
55 oz. olive oil
16 oz. palm oil
16 oz. coconut oil
Temps around 110-115 degrees

For the next version of the Favorite Castile, I added a bit of soybean oil. This was to allow more time to work with the soap when stick blending, for things like swirling, etc.

Favorite Castile III (Kathy Miller)

40 ounces olive oil
16 ounces coconut oil
16 ounces palm oil
16 ounces soybean oil
Temperature between 90-100 degrees.

This was conjured up during a coconut oil shortage in the Miller house! May have a tendency to sweat if not given enough air in storage.

Favorite Castile IV - No Coconut (Kathy Miller)

48 oz. olive oil
24 oz. soybean oil
16 oz. palm oil
4 oz. castor oil
12 oz. lye crystals
28 oz. cold water
Temperature around 110 degrees.

This soap has nice texture and is great for stick blending...doesn't thicken too quickly.

Castile with Soybean and Coconut (Kathy Miller)

40 ounces olive oil
28 ounces soybean oil
18 ounces coconut oil
28 ounces cold water
12 ounces lye crystals

Temperature: between 90-100 degrees

You can use higher temps. to 120) and might want to if you are hand stirring. I used the stick blender and the lower temps allow me more time before trace...which only took a few minutes. Since I found a local source for coconut in big buckets at a local cash and carry, I can use more of it in a recipe than I was willing to do previously (at 3.5 times the cost!). In this recipe, coconut is about 21% of the overall fat content. I don't want to go over 30%, and less if there's also palm oil in a recipe. The soybean oil can be purchased in 35# containers at our local Costco and is a reasonably low cost oil with conditioning qualities.

A Few Scent Possibilities

Mint Swirl

3/4 oz. spearmint essential oil (1.5 T.)
3/4 oz. peppermint essential oil (1.5 T.)
1/4 oz. eucalyptus essential oil (1/2 T.)

I just bought my peppermint and eucalyptus oils in the pharmacy section of Central Market...pretty reasonable there compared to local sources of EOs like the health food store. If you mail order from a place like *A Garden Eastward* or *Mint Meadow Country Oils*, you can probably beat these. After mixing in the essential oils at light trace and while the soap is thickening, but still rather pourable pour most of the soap into your large mold (use one of the base recipes that mention being good for stick blending/with some soybean). Leave about 1/8 or 1/10th of it in the pan.

To this, I added these, which were being kept warm and melted in a small measuring cup on the stove:

1/2 blue/green Crayola crayon
1/2 forest green Crayola crayon
A little bit of the original oils

[Nowadays, I've been doing this swirl with a bit of chromium oxide green powder, premoistened in a bit of warm water]

Mix the coloring in thoroughly and well (I got a few bubbles in the soap while doing this with the blender) and drizzle this soap over the white soap in the pan, distributing it evenly over the top in back and forth motions. Then, take your spatula or a knife and run it back and forth through the soap, first one direction and then either in an opposite direction or on a diagonal. Try to reach the bottom and sides of your mold while doing this. If you want a good swirl that blends to the bottom, you need to do all this at a thin trace. If the soap gets too thick, your contrasting color will just rest on top and not feather very well.

Gardener's Scrub Bar

I used one of the Favorite Castile base recipes for this soap. The following were added at medium trace:

2 ounces orange oil
1 ounce eucalyptus oil
1/2 ounce citronella oil
1/4 ounce tea tree oil
1-1.5 T. poppy seeds
1 T. pulverized dried orange peel

This soap has a orange-eucalyptus fragrance that will make you pucker a little bit! People either love or hate this scent, but many LOVE it! Nice clean scent ... bug repelling oils.

Rosemary and Mint

Add at trace:

2 T. pulverized dried rosemary leaves
1.5 ounces (3 T.) peppermint-rosemary essential oil blend from Mint Meadows (If you only have access to peppermint oil, add 1.5 ounces of it... if blending, try 1 ounce peppermint and .5 oz. of rosemary oil)

Rose Garden

2 ounces rose fragrance oil

1/2 - 1 ounce lavender or lavandin essential oil

1 T. pulverized rosemary leaves (optional)

Color the soap with pink or some rose color... if using candle dye or crayons, melt them into the base oils at the beginning.

Aussie Orange

2.5 oz. of orange essential oil or blend of citrus essential and fragrance oils

1 oz. eucalyptus essential oil (lemon eucalyptus can be nice also)

1/4 oz. tea tree essential oil

1 T. pulverized orange peel added to soap at trace

Earthy Lavender

2 oz. lavender essential oil or 1.5 oz. lavender fragrance oil (Brambleberry's is nice)

1 oz. vanilla fragrance oil (non-complex kind is better... avoid the buttery ones)

1/2 oz. patchouli essential oil

This makes a great goat's milk soap and you can use 6 oz. of evaporated goat's milk in the recipe for 4 oz. of the water

Licorice/Anise

1.5 oz. anise essential oil (using star anise for part of it is okay)

1 tsp. non-specific floral fragrance... honeysuckle and magnolia work pretty well