

MAKING LIQUID SOAP

By Ellen Peacock of Ellen's Essentials, © October 2003

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Making liquid soap is truly an art. It's hard to find a recipe that works. Most recipes end up watery, thin and cloudy. That is not a problem for some, but we like our soap thick and we want it as clear as possible!

However, after many semi/un-successful tries at making liquid soap I finally gave up. It just wasn't meant to be. Try as I might, my soap was always cloudy or runny or both. So, we simply quit. I had enough liquid laundry soap already!

Of course, most soap makers are the determined sort and I decided to try again. With books, tablet and calculator in hand I headed for a quiet corner to read. I wrote down tidbits of what I learned as I went. Taking notes was a big help. The information is just too complicated to carry around in my head.

What did I learn?

To begin with, our soap was cloudy. I was not adding enough lye to neutralize the fatty acids. Fatty acids can cause the soap to cloud up. Superfating and soap clarity are not friends. So, I used as close as I could possibly get to the exact amount of KOH recommended for the oils I chose to use.

Next I found I wasn't cooking the soap long enough. Cooking/Heat helps speed up the chemical reaction. Paste for liquid soap needs to be cooked until it reaches that clear Vaseline stage. If it's not cooked to that stage it can still be clarified, by cooking the liquid soap until it clears. It's time consuming and not very efficient clarify the soap by cooking after it's diluted.

And, I was over diluting my soap. I added way too much water at the end of the cook. When figuring out how much water to dilute your soap with, the amount of water you add to the oils in the lye solution must be considered.

Since soft oils soaps start gelling back up at 30%, we settled for a 29% dilution ratio for our soft oils soaps, but we were adding way too much. Originally we calculated we should add approximately 7 pounds (112 ounces) of water to 3 pounds of Vaseline stage soap gel. WRONG!!!! If we take into account the 33 ounces of water we added to the oil in the lye solution, we would add about 79 ounces of water instead of 112. Otherwise we end up with water thin soap and it takes a really long time to boil off 33 ounces of water!

With by making the above changes, we are much happier with our finished liquid soaps.

A LIQUID SOAP RECIPE THAT WORKS!!!

33 oz. Sunflower Seed Oil
14 oz. Coconut oil
11 oz. KOH
2 oz. Potassium Carbonate
33 ounces distilled water

(Yes, we know that when you run this recipe thru the lye calculators that it appears to be lye heavy but, it's just right.)

Be sure and use all the recommended safety gear when you make soap.. goggles, gloves long sleeved shirt, long pants and shoes, etc.

We use a crock pot to make our soap. A crock pot is just easier and more efficient than the double boiler method. We've also heard of putting the soap in a oven proof pot and cooking it in the oven. The crock pot still seems like the most efficient way.

Potassium Carbonate? What's that for? Potassium Carbonate makes the soap easier to stir. I'm for anything that makes the process of making liquid soap easier. Especially the stirring!

Add the oils to the crock pot. Don't bother heating the oils up. It's not going to make a big difference. You're going to be cooking this soap. In your lye mixing container, add the KOH and Potassium Carbonate to the 33 ounce of water.

Once the lye and potassium carbonate are dissolved, add the lye water solution to the oils. Stick blend the mixture until it has traced. Put the lid on your crock pot and set it on low.

Check the soap paste and stir often. 20 minute intervals worked for us. If the soap seems to have separated, just stir it until it comes back to trace. Cook the soap for 2.5 to 3 hours in the crockpot. Don't forget to give it a stir!

When the soap has reached the vaseline stage turn the crock pot off but leave the lid on to retain keep the soap hot.

In a large pot on the stove heat 79 or 80 ounces of water to boiling. Adjust the heating element to low. Carefully add the soap paste to the hot boiled water. Stir it a bit and put the lid on. And turn the heat off.

Let the soap sit and dissolve. It may take some time to dissolve the soap. When the soap starts to cool, heat the soap solution back up and stir the soap and put the lid back on. Repeat as necessary until the soap is diluted. You may add more water to the soap to thin it out more if you'd like.

Let the soap cool all the way down. Put some of the soap in a clear container and look at it. Sometimes we get impatient waiting for that Vaseline stage and we're not sure if we've reached it or not so we dilute the soap anyway and it's not exactly clear. If for some reason your is not as clear as you'd like cook the diluted soap longer.

Our soap was clear and the pH tested at 10. If you'd like the pH lower than 10 you can add buffering agents, boric acid or citric acid. I'm not going to go into borax, boric acid or citric acid though.. I'm satisfied with a 10.