

Makin Soap

The process of making soap is not a set process. There are many different recipes that people have come up with over the year that will get you a different variety soap. The basic process of all soap making is the same, however. some ratios of oils are added to a solution of lye. Then you can go for the hot method, cooking it to speed up the process, or the cold method, waiting for the reaction at room temperature. Both of which have their pros and cons.

Some people get crazy fine tuning their oil mixture and there cooking temperature however we will simply be using olive oil and coconut oil. Even with this the ratio between the two can be strongly variable normally with olive oil being more. I have chosen a ratio of 7:4 with olive oil being larger. We will also be using the hot method and a potassium hydroxide lye. These are both normally seen as better for liquid soaps as the cold method doesn't give any advantaged to waiting like with solid soap and potassium hydroxide makes a more soluble soap.

Ingredients

Makes a bit more then 2L

- KOH: 124 g
- Coconut oil: 200 g
- Olive oil: 350 g
- Water ~1.7L
- Additives
- Borax ~50 g

Instructions

1. Make an acid bath by adding some Citric Acid to a pan with water in it. Anything that comes in contact with the KOH will want to be washed with Citric Acid as to neutralize the base.
2. Prepare the lye by mixing water and the KOH. The concentration of the solution isn't super important as long as there isn't any solid KOH at the bottom and it's not super watery. 500ml should do the trick for this size. Keep in mind as well that KOH generates heat when mixed with water so add it a little at a time waiting for the solution to cool. KOH in water is also dangerous it may irritate the skin and can be very harmful to soft tissue like the eyes so wear eye protection.
3. Alongside this melt down the oils but don't cook them they only need to be in liquid form.
4. Once done pour the lye into the oils and put heat on it at about 90°C(194°F) or about medium in a crockpot
5. This is the hard part. Its suggested that you have a hand mixer for this, but we will do it by hand. You want to mix the liquid until it thickens to looks kind of like syrup. This will take a while.
6. After that you just want to let the liquid cook for about 2-3 hours. Mainly what you're looking for is that it looks like petroleum jelly.
7. Once you finish cooking your soap you are going to want to add hot water too it equal to its mass. With our recipe that is going to be about 1.17 liters. Make sure that the soap fully dissolves in the water. If it doesn't dissolve you may have to add a little more water, but most important is that it all dissolves.
8. At this point all that's left is to put in the additives and let the soap set for a week optionally. The soap is fine to be used however after a week some solids may fall out of solution and need to be filtered off.