

## A soap story, spring 2020

A geologist in Greece, Kostas is his name, had a passion: making natural soap! His soaps are perfect, the smell, shape, colors, the ingredients and the effect on the skin. As a friend, I observed his soap-making process and every time I visited Greece, I received one of his products as a present. At one point I started to buy them as presents for friends in Switzerland and soon people wanted to place orders, asking me to bring them soaps from Greece. Then, this virus came along and also impacted my personal work and travels. One of the consequences was that I was not packing my suitcase anymore, another one that suddenly people all over the world learned how to wash their hands properly.

To wash your hands thoroughly, you need soap.

Obtaining soap in Europe is not difficult. There is plenty of soap available and it is not expensive.

But the situation is very different in Nepal, where I have other good friends. In a small village high up in the Himalayas, 35 Sherpa families suddenly were locked in in their village. The mountaineer guides and porters were out of work, the school closed, and older students returned from studying in other cities. Suddenly everybody was at home with plenty of time on their hands. The villagers soon found themselves without enough soap to maintain basic hygiene and wash their hands several times a day.

That's where the recipe for making soap «travelled» from Greece by way of Switzerland to Nepal.

To make soap, you need certain basic ingredients, such as potassium hydroxide. As it was not available in Nepal, people had to create it themselves, using ashes and water, a cooking procedure with risks and yes, on the first try, the mass burned a hole in the pan !

But the community in Nepal succeeded in creating a first batch of soaps, which will be ready after 40 days of storage, by end of May 2020. We will be back.



# The receipe from Kostas for Nepal

(in case you want to give it a try as well)

## First : Potassium hydroxide (KOH)

This is not very difficult, but it is time consuming and involves risks.

*Very important !!!* Everything has to be done outdoors ; be very careful to protect your eyes and skin !

1. You need two big pots
2. Fill one pot with (rain) water and the other one with wood ashes (the ashes must come from hard and completely burned wood )  
- (1 part of water = 1,5 part of ash )
3. Bring the water to a boil
4. When it is boilling, pour the water little by little into the pot with the ashes until all the water is mixed with the ashes
5. Keep the mixture boiling for many hours (6 or maybe more), stir regularly\To test if the mixture is ready, scoop up a spoon full and fill an egg shell with it. If the filled egg shell floats on the water surface, the mixture is ready, otherwise you will need to add some more ash and repeat the egg shell test again ( do it every hour ) - never stop boiling
6. When everything is ok and the material is ready, remove the pot from the fire. Let it cool down, then filter the mixture.
7. Keep the filtered material. This is what you need for making soap.



## Second : Making soap

### MATERIALS

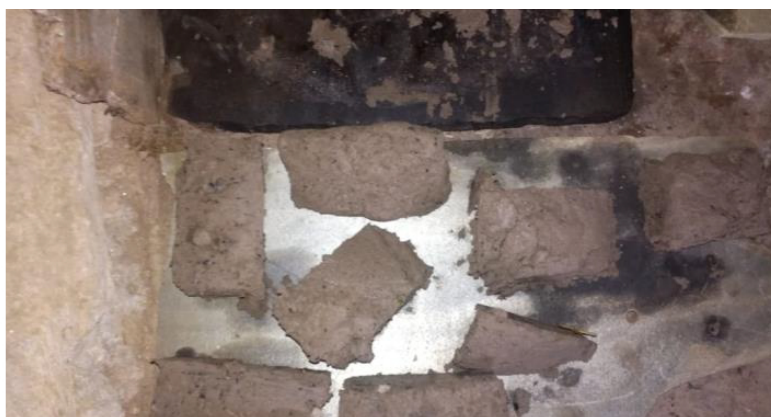
8 kilos soybean oil 3 kilos potassium hydroxide (caustic KOH) 10 kilos water 1 glass of coarse salt The most important thing is the ratio of ingredients, not their exact weights

AND

- A big cauldron
- A long wooden stirrer
- A long wide ladle
- A mold (maybe a pan lined with non-stick paper or similar)

### EXCECUTION

1. Pour the water content into the cauldron and begin to heat it<sup>1</sup>.
2. When the water is hot (not boiling), slowly add the oil.
3. Before the mix is boiling, slowly stir in the potassium.
4. After stirring in the potassium, add the salt.
5. Stir with the wooden stirrer, scratching the bottom of the cauldron.
6. Mix the content well. The mixture is going to be surging, so be careful while stirring<sup>2</sup>.
7. The ready soap will float on the top of the mixture due to its melted consistence. It will be sticking to the 'walls' of the cauldron.
8. Take the ladle to scoop out the ready soap and fill it into the mold. The molds must be ready by then. Remember to place non-stick paper between the mold and the soap.



1. If you wish to add herb tea to the soap, use half the amount of water at the beginning of the procedure and add an equal amount of herb tea just after the salt.
2. If you wish to add essential oils to the soap, add the oils just before removing the mixture from the cauldron.





If you notice a problem while stirring, such as the soap not rendering, add more salt ( $\frac{1}{3}$  of a glass) to the mixture, stir and wait for more for the soap to render.

9. When the ready soap has all been removed from the cauldron, take it off the fire to cool down<sup>3</sup>.
10. Smooth out the soap surface in the mold, cover it with a blanket or similar, and leave it alone in a dark and wet place for 24 hours.
11. The next day, uncover and cut the soap into the desired shape and size.

Store the soap pieces in a dark and well -ventilated place. Rotate the pieces  $\frac{1}{4}$  turn every week (4 sides – 4 weeks). By following the above procedures, in 4 to 5 weeks, we can call ourselves **SOAP PRODUCERS**.

And some soaps from Kostas in Greece, after testing many different ways of producing soap :)



<sup>3</sup> Since the potassium mixture is very corrosive, it is best to empty the cauldron into a hole in the ground. Leave it uncovered until the following day.