# **Liquid Foaming Soap**

This makes a very large amount (3 ½ gal concentrated soap) so you many want to halve or quarter the formula.

## **INGREDIENTS**

#### Oils

- 40 oz coconut oil
- 30 oz. olive oil (do not need to use virgin olive oil, lower grade oil is fine for soap)
- 30 oz castor oil

## Lye & water

- 23.9 oz Potassium Hydroxide
- 75 oz. Distilled water (for first phase)

#### **Neutralizer**

- 6 oz distilled water
- 3 oz borax

#### **Additives**

- 18 oz. Honey
- 18 oz. Vegetable Glycerin

2 gal. distilled water for dissolving soap paste.3 gal distilled water when bottling soap

## **EQUIPMENT**

- Large enameled pot for mixing soap
- Larger pot with lid to set soap pot into for a water bath
- Smaller enameled pot for mixing lye
- Whisk
- Spatula
- Stirring stick
- Large plastic mixing spoon
- Immersion blender
- 5 gallon plastic bucket with lid
- Blankets to insulate bucket
- Eye protection
- Gloves
- Thermometer
- Pitcher
- Scale
- Foaming soap bottles
- Syphon hose
- Empty water jugs

# **PROCEDURE**

• Begin to heat water for water bath on stove

#### OILS

• Weigh oils and put in large mixing pot. Melt over medium heat stirring with whisk. Heat oils to 160 degrees F.

## LYE

- Wearing gloves and eye protection, Weigh out water into small pot
- Weigh lye into a plastic container
- Go outside to <u>pour the lye into</u> the <u>water</u> and stir. Water will heat up and may even make a noise. It will produce a steam. Do not breath. Walk away then come back to stir when steam has subsided. Let cool to 140-160 degrees F.

#### **MIXING**

- Pour the lye water into the oils and whisk vigorously.
- Use the immersion blender to blend for 1 minute at a time. Stir with a whisk in between times. May need to let it set for a minute before blending again. It may take 5 -15 minutes for the oil and lye to saponify. Just before the soap saponifies, it will begin to heat up again and you may

notice steam starting to rise. Watch closely and remove immersion blender or whisk because the soap will all at once turn solid and you don't want whisk stuck in soap.

### **HOT WATER BATH**

- Place mixing pot with the soap paste into a larger pot making a hot water bath. Put lids on both mixing pot and water bath pot.
- Keep water at a low boil while on stove. Let soap "cook" for 3 hours on stove.
- At end of cooking time, heat the 2 gallons of water in a additional pot.
- Carefully scoop out the soap paste into the 5 gallon bucket. Pour the hot water over the soap
  paste and stir with a stick that will reach the bottom of bucket.
- Put lid on bucket and wrap insulating blankets around bucket.

### **NEUTRALIZE SOAP**

- The next day, stir the soap paste. It should easily dissolve. If not completely dissolved, rewrap bucket and let it sit a bit longer.
- After all soap is dissolved, mix the neutralizer of water and borax. This will get rid of any free lye that may be in the soap. After pouring the neutralizer mixture into the soap, mix well with stick.
- Add the honey and glycerin at this time.

#### SEQESTER

- Let the soap set undisturbed for at least 3 days. This will allow time for any sediments to settle to the bottom.
- Carefully siphon or dip out the liquid soap into gallon jugs for storage. Do not mix up sediment
  in bottom of bucket. If instead of sediment you have soap scum on TOP of the soap, skim this
  off before dipping soap into jugs.

## **SCENTING AND COLORING SOAP**

- Soap is diluted with distilled water one more time 1:1 before using.
- It is also scented and colored as desired at this time before putting into foaming pump bottles.
- Only used dyes in soap, no pigments or anything that is not water soluble.
- Fragrances or Essential oils may be used as scent. Some do not mix into soap as well as other. You will have to experiment. Use about .10 oz. of scent for each 8 oz. bottle.

There are various internet sources to buy supplies. I like to use Majestic Mountain Sage <a href="https://www.thesage.com">www.thesage.com</a> or Soapers Choice <a href="https://www.soaperschoice.com">www.soaperschoice.com</a>

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