

# Soap Making

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<https://www.savvyhomemade.com/how-to-make-homemade-soap-using-cold-process/>

## Ingredients For The basic Soap Recipe:

Makes about 12 standard or 10 chunky bars:

- 380g Shortening (vegetable fat)
- 330g Coconut Oil
- 300g Olive Oil
- 310g Mineral Water (distilled water)
- 145g Soap making Lye (caustic soda)
- 25 ml (6 tea spoons) Essential Oil or Fragrance oil

Note on adjusting the volume of your Essential oils or Fragrance oils:

You can adjust the scent volume here. I've set it at 25ml which is 2% of all the oils and water added together. Depending on your preference you can increase it up to 5% which in this recipe would be 66ml Max. That however would be very strong depending on what oils you are choosing, so I recommend starting at 2%.

## The Cold Process Method:

### STEP 1:

Gather and measure the ingredients shown above or from one of my other cold process soap recipes.

You will need to measure your soap making ingredients carefully, Do Not try to guess or use cup sizes as when you make soap it needs the correct mixture to complete the saponification process. Use either grams or ounces, do not mix the two.

I prefer grams as I find it much more accurate, if you need to convert ounces into grams for any reason simply multiply by 28.35. More information on measuring, easy conversion and other cosmetic tips can be found here.

### STEP 2:

Prepare a soap mold. If you don't have a specific soap mold, then any good size container will do. Sturdy plastic containers that still have enough give to ease the soap out make the best containers because you don't have to line them. Recently I've been using silicon molds as it's so much easier to remove the soap.

A quick grease round with a little solid oil from the recipe, and they're good to go. Glass, wood, ceramic or cardboard all lined with freezer/butcher paper will also make suitable molds. Avoid using any metal molds unless you can be sure they are stainless steel.

### **STEP 3:**

Put on protective eyewear, mask, apron and long rubber gloves. Pour the mineral water into a large glass/sturdy plastic jug or plastic bucket. Slowly, add the lye (caustic soda), using a plastic spatula to stir until dissolved.

The water will start to heat when it reacts with the lye; it will need to cool until it reaches the required temperature (see specific recipe).

### **STEP 4:**

In a large stainless steel or enamel pan, gently melt any oils or waxes over a low heat. (This does not include essential or fragrance oils). Use two candy thermometers place one in the caustic soda mix and one in the oil mix. Update; I now use an infrared thermometer gun I bought on Amazon, it's much easier.

When both mixtures reach an equal temperature (see specific recipe) begin to stir the lye into the oil, do this SLOWLY, and remember that you should always add lye to other materials, not the other way around, pouring a liquid into lye crystals can cause it to splash and can burn your skin.

### **STEP 5:**

Using a stick blender begin carefully stirring your mixture for several minutes, slowly at first without switching the blender on.

Reaching the 'Trace' Stage: Then give your mixture a few short 3 second bursts, stirring between each burst until the mixture thickens slightly and looks a little like thick custard.

This is called "trace" and it's a sign that your soap is turning out well. By dipping your spatula or spoon into the mixture and dribbling a small amount back into the mix. It should leave a light "trace" behind (like a small mound of soap that takes a few seconds to blend back within the mixture.) This is when you know you've reached the "trace" stage.

Or by hand which will take a little longer, maybe up to an hour but with consistent slow even stirring with a hand whisk you will eventually reach the trace stage.

And now is usually the time to add any extras like flowers, fragrance, essential oils, colors or textures into your soap recipe. But check the individual recipe to be sure.

There are so many things that you can add when you make your own soap, check out some of these interesting soap making ingredients and textures.

### **STEP 6:**

Pour your soap into the mold and smooth out using a spatula.

Place a piece of cardboard over the top of it and wrap an old towel around the whole thing to keep the heat in.

### **STEP 7:**

Allow your soap to set for 24 hours in a warm place until the soap has hardened. Don't be too alarmed if you take a quick peek at your soap and it looks translucent, this is called the gel stage and is perfectly natural.

### **STEP 8:**

When the soap has hardened (usually around 24 hrs), remove from the mold and allow it to air for a few hours.

As a general rule it should be about the consistency of hard cheese before you cut it. The soap will still be caustic at this point so I would recommend still handling it with gloves for the first 48 hours.

### **STEP 9:**

Cut your soap into blocks, for this you can simply cut by hand for a more rugged look or use your soap cutting box for something more symmetrical.

Next cover/line a cooling rack, tray or box with a cloth and stand the soap blocks upright without touching each other so the air can circulate. Store them in a dry ventilated place turning them each day in the first week and then every other day thereafter for 4 weeks.

This time continues the curing process ensuring that all of the lye has been neutralized and water evaporated. During this time you may find a fine dust on your soap, this is soda ash and can be scraped off before use.

### **STEP 10:**

All of the cold process soap recipes on Savvy homemade allow 5% superfatting. This ensures correct saponification (the reaction that creates soap) making sure there is zero free caustic alkali remaining and a good pH balance is achieved.

As long as you have measured your ingredients correctly you have nothing to worry about. To be sure always test soap using a pH strip to make sure it is somewhere between 7-10.