



## Lemon Drop Swirl Cold Process Soap Recipe



## INFORMATION

- Difficulty: Intermediate
- Yield: 14 Bars

## TIMING

- Prep Time / Clean Up: 30 Minutes
- Perform Time: 2 Hours
- Total Time: 2 Hours, 30 Minutes (longer if putting through gel, which is recommended)
- Cure Time: 4-6 Weeks

## SUPPLIES

- [Goggles](#)
- Extra Long Disposable Nitrile Gloves (easily found at local supermarket)
- [Digital Scale](#)
- [Digital Thermometer](#) or Infrared Thermometer
- Stick Blender
- 2 Quart Glass Mixing Bowl or Microwavable Plastic Bowl
- 5 x [Funnel Pitchers](#)
- Squeeze Bottle w/ Liner (not pictured)
- Small Containers (for holding ingredients)
- 3 x Spatulas
- Spoon (for scooping coconut oil and lard)
- [Pipettes](#) (for fragrance or essential oils)
- 5 x Zipper Bags for Mixing Colorants
- Measuring Spoons
- Fine Mesh Strainer (Stainless Steel)
- Skewer or Chopstick (For Swirling the Top)
- Paper Towels
- 10" Silicone Loaf Mold
- 4" Silicone Loaf Mold (or other molds to hold around 20 oz)
- Heating Pad (Optional)
- Timer (Optional)
- Plexiglass or Cardboard (cut to fit top of mold) (Optional)
- Plastic Wrap (Optional)
- Towels/Blankets (Optional)
- Knife or Wire Soap Cutter
- Ruler
- Pointy Tool (to mark soap, a toothpick would work)
- Vegetable Peeler (Optional)

## INGREDIENTS

- 11.7 oz / 332 g *Cold* Distilled Water (Water as a percent of oil weight: 25%)
- 6.6 oz / 186 g Sodium Hydroxide (Lye) (6% Super Fat/Lye Discount)
- 3 teaspoons / 20 g Sodium Lactate (Optional) (helps soap to harden and release from mold sooner) (1 teaspoon Per Pound of Oils (PPO)) If not available, dissolve 1/4 teaspoon salt per pound of *hard* (saturated) oils in distilled water and cool before adding lye. For this recipe use a scant 1/4 + 1/8 teaspoon.)
- 11.7 oz / 332 g Coconut Oil (25%)
- 14.0 oz / 399 g Lard (30%)
- 2.3 oz / 66 g [Castor Oil](#) (5%) (plus some for mixing colorants)
- 2.3 oz / 66 g [Avocado Oil](#) (5%)
- 16.4 oz / 465 g Olive Oil (35%)
- 2.9 oz / 82 g [Lemon Sugar Fragrance](#)
- 1.0 oz / 28 g [Lemongrass Essential Oil](#)
- 1-1/4 teaspoon [Titanium Dioxide](#)
- 1/8 teaspoon [Yellow Oxide](#)
- A heaping 1/8 teaspoon [Blinded by the Light Neon Pigment](#)
- 1/4 teaspoon [Lemon Twist Mica](#)
- 1/2 teaspoon [Groovy Green Mica](#)
- 1/8 teaspoon *and* a heaping 1/4 teaspoon (divided) [Radioactive Green Neon Pigment](#)
- 3-.15 scoops [Chromium Oxide Green](#)
- 1 teaspoon [Smooth Coconut Carbon](#) or Activated Charcoal

## DIRECTIONS

Before starting this tutorial please make sure to read all instructions.

You should have a basic understanding of making cold process soap before you begin this tutorial.

It is always a good practice to put any new recipe through a soap calculator like:

<http://soapcalc.net/calc/SoapCalcWP.asp>.

### Step 1 – Gear up for Safety

Put on your long sleeves, long pants, shoes, safety goggles, and gloves. Work in a well ventilated area that is free from distractions.

## **Step 2 – Make Lye Solution**

Measure cold distilled water into funnel pitcher. In a separate container, measure sodium hydroxide. Sprinkle the sodium hydroxide into the cold water. Stir gently to avoid splashing. Make sure to avoid breathing any fumes. (Please note that when lye is added to the water it will heat up very quickly. For this reason, never use a glass container for mixing your lye and water, and always add lye to water and not the other way around because of the potential lye volcano. Just remember, “Snow falls on the lake.”)

Set aside in a safe place that is well ventilated to cool.

Measure sodium lactate into small container and set aside near lye solution.

## **Step 3 – Make Oil Solution**

Measure coconut oil in 2-Quart Glass Mixing Bowl or Microwavable Plastic Bowl.

Zero scale and measure lard into the same bowl.

Melt in 30 second bursts until coconut oil is completely melted.

In the meantime, measure castor oil into a funnel pitcher. Then, zero scale and carefully add the avocado oil. Next, zero scale again and carefully add olive oil.

Then measure the essential oil and fragrance into a separate container.

Next, add the pitcher of liquid oils to the melted hard oils. Stir until completely clear.

Then add the essential oil and fragrance combination. Stir and set aside.

## **Step 4 – Prepare Colorant**

Open each of your 5 zipper bags. Listed below are the amounts and colorants that go in each bag. Try not to let the colorant go all the way to the corners of the bag before the oil is added.

1. 1-1/4 teaspoon Titanium Dioxide
2. 1/8 teaspoon Yellow Oxide, a heaping 1/8 teaspoon Blinded by the Light Neon Pigment, and 1/4 teaspoon Lemon Twist Mica
3. 1/2 t Groovy Green Mica, 1/8 teaspoon Radioactive Green Neon Pigment
4. 3-.15 cc scoops Chromium Oxide Green, and a heaping 1/4 teaspoon Radioactive Green Neon Pigment
5. 1 teaspoon of Smooth Coconut Carbon or Activated Charcoal

Once you have added all the colorants to the bags, add around double to triple that amount of castor oil. (We just eyeball it. For example, for the 1-1/4 teaspoon colorant in the first bag, you would add 2-1/2 to 3-3/4 teaspoons of oil.)

Once you have added all the oils try to press out all air and close bags. Mix contents of bags by rubbing and manipulating until all specks of colorants are completely dispersed.

## **Step 5 – Make Soap**

If you want to gel your soap, which is recommended, now is a good time to turn your heating pad on high.

When the temperatures of the lye solution and the oil solution are within 85° - 95° F (29° - 35° C), carefully (with safety gear still on) add sodium lactate to the lye solution and strain solution into the oils, pouring close to the top of the oils to avoid adding air bubbles to the mixture.

Before turning it on, insert stick blender at an angle to the bottom and shake it a bit to release any trapped air. Then, pulse and blend until the mixture is just emulsified. (It should be very thin, but should not break apart when you look at the batter on the stick blender.)

## **Step 6 – Split & Color Batter**

Pour 10.3 oz / 292 g of batter into 4 different funnel pitchers. Cut off the very tip of the corner of the white colorant and squeeze into the remaining batter in the big bowl. Stir. Next color each of the remaining pitchers in the same way. Mix thoroughly.

Pour the black batter into a lined squeeze bottle.

## **Step 7 – Pour Batter**

Pour the mold half full of white batter, pouring close to spatula to avoid adding air bubbles. Bang the mold on working surface to release any trapped air. Add remaining white batter to the other funnel pitcher.

Clean up any batter that may have splattered on the sides of the mold.

Using the squeeze bottle add a single layer of black batter to the surface of the white batter.

Make sure not to break through the white batter.

Next, pour most\* of the dark green batter from high above, the thicker the batter, the higher you should pour from. For this tutorial, we poured from the high of around 12 inches / 30 cm.

\*Keep in mind that there will be enough batter to make 4 more bars of soap, so don't completely empty each pitcher of batter.

After you have poured the dark green, use the squeeze bottle to fill in the black layer on top.

(The black layer on top causes each of the drops of color to have a lovely black outline.

In the same manner, pour the yellow, white, and lighter green, each followed by a fill-in layer of black.

Spatter different colors of batter on the top and swirl as desired. Bang the mold on working surface to release any trapped air. Add remaining batter to other mold(s) and design as desired.

## **Step 8 – Put Through Gel\***

Next, set your molds on top of the heating pad. Then, cover with plexiglass/cardboard and then cover and seal with plastic wrap. Next, insulate with blankets/towels.\* Set your timer for 30 minutes. When the timer rings, slide your hand up under the towels and feel the air. If the air is warm, turn off the heating pad. If it's not warm, keep repeating in 30 minute increments until the air under the towels feels warm, then turn off the heating pad. At this point, make sure the mold is snug and keep it covered for at least 48 hours. (The sooner the soap is exposed to air, the more likely it is to develop soda ash (a white film on the surface of the soap)).

\*Ambient temperature matters as well. If your home is warm, you probably won't need the heating pad or the insulation.

You don't have to put your soap through gel; you will get soap no matter if it goes through gel or not. This soap is made with a lower percentage of water to prevent glycerin rivers. With less water, soap goes through gel phase faster, often causing partial gel. That's why it often needs to be forced through gel. Other benefits of forcing soap through gel are that it releases from the mold easier, it is harder, it cures faster & lasts longer, the colors are often more brilliant, and it avoids partial gel.

## **Step 9 – Clean Up**

It is good practice to wipe out all containers before doing dishes. Wipe out all oils and all lye solution with paper towels and safely dispose of. All soap batter can be wiped out with a cloth towel and washed with laundry.

Wash all wiped out dishes with warm soapy water.

## **Step 10 – Unmold and Tidy Up Cut Soap**

After 48 hours, if the soap releases from the mold easily without sticking to the sides, it's ready to unmold. If not, cover and let it sit until it's ready. (It doesn't pay to rush unmolding.)

Bevel all four long edges of each soap loaf.

Mark your soap and cut it into 10 pieces and the other into 4 pieces.

Bevel remaining edges if desired.

Finally, allow them to cure for 4-6 weeks in a well ventilated area and Enjoy!