

# Coconut Oil Liquid Soap (fragrance-free)

## Notes

- read [our beginner's guide to soapmaking](#) if you need
- [build your own recipes](#) - use ours only as reference
- lye is corrosive! [Read about lye safety](#).

Love,  
gentle living shop



## Materials

- 300g coconut oil
- 84.81g potassium hydroxide (90% purity)
- 254.43g water (we used soft tap water)
- 1% superfat (calculated as lye discount)
- (this recipe has no additives)

## Tools

- Safety gear (rubber gloves, safety goggles, mask)
- Scale
- [Lye safe containers](#) x 3 (stainless steel, polypropylene, HDPE)
- Lye safe stirring utensil (stainless steel, silicone)

## Steps

1. Build your **recipe** and use [soapmakingfriend.com](http://soapmakingfriend.com) to double check your math
2. Prepare your **workstation** with all your tools, materials and safety gear
3. Weight out the exact amount of **water** into a lye safe container, set it aside
4. Weight out the exact amount of **oil** into a lye safe container, set it aside
5. Put your **safety gear** on (make sure you are also wearing long sleeves)
6. Weight out the exact amount of **KOH** into an empty and dry lye safe container
7. Slowly **pour KOH into water** (never the other way), cover it with a lid to protect yourself from the fumes
8. After KOH is fully dissolved, slowly **pour lye solution into oil and stir**. At first, colour of oil will become creamier, and then the consistency will gradually turn thicker.
9. After 30 minutes of hand stirring (it will take longer for bigger batches and if room temperature is low), the soap batter will reach a thick pancake batter like consistency and a white colour. This is a good place to stop stirring as the oils have fully emulsified with the lye.
10. Cover the container with foil and a towel, set it aside for at least 12 hours
11. After 12 hours, it should now be a thick paste with a off white creamy colour
12. Transfer soap paste into an airtight container and leave it for 3 weeks until paste becomes translucent. This is important as we did not use heat so the soap paste needs extra time to let excess lye settle and for its pH to drop to a more gentle level.
13. To clean up, leave containers that have come into contact with lye untouched for at least 24 hours. All excess lye will be neutralised by then, wash as normal.

## Dilution

- Dishes, tough stains - 1 : 1, soap paste : water (e.g. 100g soap paste, 100g water)
- Hand-washing clothes - 1 : 2, soap paste : water (e.g. 100g soap paste, 200g water)

Let the soap paste dissolve in water overnight. It may appear cloudy at first, but the liquid will clear up (sequester) in a few days. However, if you used hard water to dissolve the soap paste, it may remain cloudy. Add fragrances into diluted soap if you so desire.

**Watch video tutorial:** on YouTube - <https://youtu.be/4ZXG9WBK0yA>

or on PeerTube - <https://diode.zone/w/wvM5P5Q1mm94mqFj1oEJK5?subtitle=en>

**Any updates to this tutorial will be on:** <https://gentlelivingshop.org/liquid-soap-tutorial.html>



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