

# How to Make Homemade Hand Sanitizer

## How It Works

The active ingredient is the alcohol, which needs to comprise at least 60% of the product in order to be an effective disinfectant. The recipes call for 99% ethanol (grain alcohol), vodka or isopropyl alcohol (rubbing alcohol) ONLY. If you use a product that contains a lower percentage of alcohol (e.g., 70% alcohol) then you need to increase the amount of alcohol in the recipe or it won't be as effective. 90% isopropyl alcohol does exist and works best!

**CORONAVIRUS DISCLAIMER:** Hand sanitizers are not a substitute for proper handwashing but are to be used when handwashing is neither appropriate or available at the time (such as when traveling or in areas where handwashing would be difficult or impossible. It has never been tested in a lab to determine its efficacy against viruses such as the coronavirus.

## Essential Oils in Hand Sanitizer

In addition to adding fragrance to your hand sanitizer, essential oils may also help protect against germs. Thyme & clove oil have antimicrobial properties. If you are using antimicrobial oils, only use a drop or two, since these oils tend to be very powerful and might irritate your skin. Other oils, such as lavender or chamomile, may help soothe your skin. Tea tree is also used but if you have pets, avoid using this as tea tree oil is toxic to animals such as dogs and cats. **Lavender:** known for their antibacterial and antiviral properties. **Tea Tree Oil:** known to be anti-fungal, antimicrobial, antiseptic, antiviral, and antibacterial. **Lemongrass Oil:** known to be antibacterial and antifungal. **Aloe vera:** known to be antibacterial and antifungal and it does double duty as a moisturizer. **Vitamin E:** Moisturizer and helps keep recipe fresh so try to add it into whichever version you use!

**Essential oil disclaimer:** These recipes use what are considered safe oils, but remember while completely natural, all essential oils are powerful plant compounds that you, your family and pets might have reactions to. **\*Never\*** use essential oils undiluted or take essential oils internally (diluted or undiluted) and always read up about the possible side effects of each type of oil before you use it. Avoid the use of essential oils (diluted or undiluted) during the first trimester of pregnancy, on small babies, and on anyone with severe allergies to the plants they're derived from. If you see reactions in you, your family or pets, stop using essential oil immediately and contact a doctor.

# Version 1

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Funnel

Bottle with pump dispenser

### Materials

2/3 cup 90-99% rubbing alcohol (isopropyl alcohol) or ethanol

1/3 cup aloe vera gel

8 to 10 drops essential oil, optional

## Directions:

1. *Gather Your Ingredients:* Make sure you have your rubbing alcohol, aloe vera gel, and optional essential oils ready and measured out.
2. *Mix Ingredients:* Add all ingredients together in your bowl and mix thoroughly with a spoon.
3. *Pour Into A Bottle:* Using the funnel, carefully pour your hand sanitizer into the bottle of your choice, screw the top of your bottle on tight, and begin using.

Note: Shake gently before each use. To make a hand sanitizer spray, simply use witch hazel instead of aloe vera gel in this recipe.

Tip: You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 2

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Clean medicine syringe

Empty squeezable tube

### Materials

3 TB aloe vera

2 TB witch hazel or rubbing alcohol, if using alcohol reduce to 1 TB

1/2 tsp vitamin E oil

20 drops tea tree essential oil

10 drops lavender essential oil

## Directions:

1. **Gather Your Ingredients:** Make sure you have your rubbing alcohol, aloe vera gel, and optional essential oils ready and measured out.
2. **Mix Ingredients:** Add all ingredients together in your bowl and mix thoroughly with a spoon.
3. **Put Into A Tube:** Using the clean medicine syringe, Carefully inject your hand sanitizer into the tube of your choice, screw the top of your tube on tight, and begin using.

**Note:** This recipe will make 2 fl oz. To use the hand sanitizer, store in a small jar or a squeeze tube. You can also use these tubes for homemade toothpaste.

**Tip:** You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 3

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Clean medicine syringe

Empty squeezable tube

### Materials

3 tablespoons aloe vera gel

1 tablespoon filtered water

5 drops tea tree essential oil

1 teaspoon vitamin E

## Directions:

1. Gather Your Ingredients: Make sure you have your rubbing alcohol, aloe vera gel, and optional essential oils ready and measured out.
2. Mix Ingredients: Add all ingredients together in your bowl and mix thoroughly with a spoon.
3. Put Into A Tube: Using the clean medicine syringe, Carefully inject your hand sanitizer into the tube of your choice, screw the top of your tube on tight, and begin using.

Note: This recipe will make 2 fluid oz. To use the hand sanitizer, store in a small jar or a squeeze tube. You can also use these tubes for homemade toothpaste.

Tip: You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 4

\*Not for use with children if vodka or ethanol is used!

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Clean medicine syringe

Empty squirt bottles (or spray bottle)

### Materials

5-10 drops lavender essential oil

30 drops tea tree essential oil

3 ounces high-proof vodka, or rubbing alcohol can be substituted

1-ounce pure aloe vera gel

¼ teaspoon Vitamin E oil

## Directions:

1. Add essential oils and Vitamin E oil to a small glass bowl or container and swirl to mix. Add alcohol to the oils and swirl again. Combine this mixture with the aloe vera gel and mix well.
2. Transfer hand sanitizer to small, clean squirt bottles. Also, **use colored bottles** like this so the essential oils in the recipe are not exposed to light.

Note: Shake gently before each use. (Sanitizer should last several months with the addition of Vitamin E and alcohol to help preserve.) To make a hand sanitizer spray, simply use witch hazel instead of aloe vera gel in this recipe.

Tip: You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 5

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Clean medicine syringe

2-ounce spray bottle

### Materials

5 drops vitamin E oil (optional, this makes for soft hands!)

2 tablespoons witch hazel with aloe vera or vodka

5 drops lemon essential oil

5 drops orange essential oil

5 drops tea tree essential oil

Distilled (or at least filtered, boiled, and cooled) water

## Directions:

1. In the spray bottle, combine the vitamin E oil, witch hazel or vodka, and essential oils. Place the sprayer on tightly and shake well for 15-20 seconds to combine.
2. Open the bottle, and fill to the top with water. Replace sprayer and shake again for 15-20 seconds.
3. Print and stick the label to the bottle. If you don't have label sheets, you can also print the label onto regular paper, and then use clear packing tape to adhere the label to the bottle by using the tape like lamination over the entire label.
4. Spray liberally on your hands whenever you feel like they need a bit of a deep clean. Rub hands together until dry.

Notes: CORONAVIRUS DISCLAIMER: This hand sanitizer recipe does not include the 60%+ alcohol content that the CDC and other health organizations recommend for hand sanitizer to properly kill coronavirus. It has never been tested in a lab to determine its efficacy against viruses such as the coronavirus. A recipe that contains this level of alcohol can be found through the World Health Organization.

Tip: You're allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 6

\*The blend includes oils with proven anti-bacterial and anti-viral properties and adds aloe vera gel for smoothness. It contains no chemicals or alcohol, which might cause skin irritation

## What You'll Need:

### Equipment / Tools

Bowl and spoon

Clean medicine syringe

4-ounce spray bottle

### Materials

3 ounces sterile water

1 TBSP of aloe vera gel

10 drops **EACH** of cinnamon, clove, rosemary and eucalyptus essential oils

20 drops of either lemon, orange or grapefruit essential oil

## Directions:

1. Start with a 4-ounce spray bottle and fill it about  $\frac{3}{4}$  full with sterile water (all 3 ounces).
2. Add 1 TBSP of aloe vera gel and mix.
3. Add 10 drops each of cinnamon, clove, rosemary and eucalyptus essential oils.
4. Add 20 drops of either lemon, orange or grapefruit essential oil – whatever aroma fits your mood.
5. Place the spray dispenser top on securely and mix thoroughly.
6. Spray two or three times on your hands and rub together.

Notes: CORONAVIRUS DISCLAIMER: This hand sanitizer recipe does not include the 60%+ alcohol content that the CDC and other health organizations recommend for hand sanitizer to properly kill coronavirus. It has never been tested in a lab to determine its efficacy against viruses such as the coronavirus. A recipe that contains this level of alcohol can be found through the World Health Organization.

Tip: You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.

# Version 7

**\*Not for use with children if vodka or ethanol is used!**

## What You'll Need:

### Equipment / Tools

#### **2-ounce spray bottle**

Bowl and spoon

Clean medicine syringe

### Materials

10 drops Lavender oil

6 drops Lemongrass oil

25 drops of Tea Tree oil

1-ounce (6 teaspoons) Aloe Vera gel

2 ounces (12 teaspoons) grain alcohol\* (such as Vodka) or you can use witch hazel

1 tsp Vitamin E oil

## Directions:

1. Add essential oils and vitamin E oil to a small glass bowl or container and swirl to mix.
2. Add witch hazel (or alcohol) to the oils and swirl again.
3. Combine this mixture with the aloe vera gel and mix well.
4. Transfer hand sanitizer to small, clean spray bottles. Use colored bottles so the essential oils in the recipe are not exposed to light. The sanitizer spray is perfect for traveling. Just throw into a purse or a backpack! Shake gently before each use.

**Note:** The CDC recommends using hand sanitizer with at least 60% alcohol content. Any homemade recipe should be 2/3 alcohol to 1/3 aloe, or 2:1. The above recipe made with the grain alcohol makes a sanitizer with just over 60%. If you want a sanitizer with a higher alcohol percentage, then increase alcohol and decrease the amount of aloe vera or make sure to use 95% grain alcohol.

**Tip:** You are allowed to bring containers that are 3.4 ounces (100 milliliters) or smaller in your carry-on bag.