

# ZERO WASTE SWITZERLAND

## Homemade cleaning products

Easy,  
zero waste,  
efficient and  
tested recipes.

# Introduction

To clean your home and your belongings, there is no need to have many cleaning products, despite what advertisements say. With just a few ingredients – baking soda, white vinegar, castile soap, black soap, soda crystals, calcium carbonate, and calcium percarbonate – you can clean your home efficiently. It will also save you money!

You will find the ingredients to make zero waste cleaning products in drugstores, pharmacies or bulk stores. In this guide you will find easy recipes and more elaborate ones. Choose the recipes that suit you best.

For those who do not want to make their cleaning products, you can find natural alternatives in bulk shops. You can find a map listing the shops on our website [www.zerowasteswitzerland.ch](http://www.zerowasteswitzerland.ch), under "Tips & tricks, good spots".



## Impressum

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Thank you to Romaine for sharing her recipes and tips.

Thank you to the ZeroWaste Switzerland ambassadors who contributed to this guide by sharing their tips and expert advice.

Some recipes, technical or chemical explanations come from the book "Green Washing" by Cécile Berg (Paris 2016, Editions La Plage), in French.

# CLEANING

## Citrus Infused Vinegar

### Preparation time:

5 minutes

### Infusion:

3 weeks

### Instructions

#### 1:

When you eat citrus, cut the peel and keep it in the freezer. When you have enough put the peels into a 1l or more bottle.

#### 2:

Pour 1l of white vinegar into the bottle and let it sit for 2 weeks on the window sill. Filter and it's ready.

### Notes

Citrus infused white vinegar smells great! In a spray bottle, it degreases the kitchen, disinfects the fridge, descales the shower or can be used as a fabric softener. It's the number one cleaning product to have in your home!

### Utensils

1 glass bottle of 1 l or more

1 strainer

1 funnel

### Ingredients

Citrus peels

1 l of white vinegar



# CLEANING

## Ash laundry detergent

**Preparation time:** **For** dirty laundry, dirty floors

10 minutes + 10 minutes

**Infusion:**

3 days

### Instructions

**1:**

Sift the wood ashes in a fine strainer (about 2 cups of ashes per liter of water). Put the ashes and the warm water in a big bucket.

**2:**

Let the mix sit for 2-3 days; stir it from time to time. It will get a bit viscous, that's normal.

**3:**

Filter the mix into two layers of fine cloth. You can scatter the remaining ashes in the garden or the compost.

**4: optional**

To scent the laundry add 2 to 5 % of ecological laundry detergent.

### Notes

Use 1 cup per load, you can add:

- 1 tablespoon of baking soda (stain remover)
- 1 tablespoon of soda percarbonate (whitening)
- 1 tablespoon of baking soda (deodorant)

If you don't have ashes, ask people around you. 12% of buildings in Switzerland are heated with wood. Your friends or neighbors will certainly give you some.

To scent your clothes, make little bags of dried lavender and store them between your clothes.

### Utensils

1 strainer

1 bucket

2 cloths to filter

1 laundry detergent container

### Ingredients

100 g wood ashes per liter

Warm tap water

### Optional

ecological or perfumed laundry detergent



# CLEANING

## Ivy laundry detergent

### Preparation time:

15 minutes + 15 minutes

For laundry

### Infusion:

1 night

### Instructions

#### 1:

Collect two handfuls of ivy leaves (about 85g.) and wash them on both sides then chisel them.

#### 2:

Put the cut ivy leaves in a pot with 1,2 liter of water and bring it to a boil covered. Let it brew all night.

#### 3:

The next day filter the liquid (press the leaves well) and put it in the glass bottle. If you wish you can add essential oils and 1 tablespoon of vinegar for the smell. You can keep the mix in the fridge for up to 3 weeks.

### Notes

Ivy is easy to find in gardens as it is an invasive plant. Its leaves contain saponins which are natural surfactants with detergent properties (between 5 to 8%). It is this substance that will clean your clothes. But before that, you need to extract them from the plant by cooking the leaves in water and let it infuse.

Adding essential oils give the liquid a nice smell, but it will go away once the laundry is dry. As they are expensive, it is better to use a natural fragrance or nothing at all!

Use about 100ml per 5kg load. You can add percarbonate of soda for whitening, baking soda to fight smell or soda crystals (stain remover) as needed (1 tablespoon).

To give a nice smell to your clothes, you can make little bags with dried lavender or store scented soaps between your clothes.

### Utensils

1 liter glass bottle

1 pot

1 strainer

### Ingredients

85 g of ivy leaves, cleaned and chiseled

1,2 liter of water

### Optional

1 table spoon of white vinegar with 20 drops of lavender essential oil



# CLEANING

## Soap detergent (with bicarbonate or borax)

**Preparation time:** For dirty laundry with stains

10 minutes + 10 minutes

**Infusion:**

3 days

### Instructions

**1:**

Pour 2 liters of water on top of the castile soap chips in a large pot of minimum 5 liters. Warm it up while stirring until the chips dissolve.

**2:**

Dissolve the baking soda and the borax (or the citric acid and the baking soda) in lukewarm water.

**3:**

Add the second mix to the first and mix them together. The mix will get thicker and opaque. Mix it well, cover it and let it cool down. Whip it from time to time until completely cold.

**4:**

When the detergent is cold (after approximately 1 night), it is possible that it has congealed. Add 1 liter of warm water and mix it to obtain a fluid cream. Let it cool down again and put the mix into the bottles. Use 100 to 150 ml per load (4-5kg) or 200 ml for a 6kg load.

### Notes

Borax is a mineral found in nature, often near sodium carbonate. This powder is basic

(pH 9-9,5), can be bought in drugstores and has antiseptic properties. It is also an insecticide. In the presence of heat and a basic ingredient like baking soda, the borax releases oxygen peroxide with strong washing and stain removal power. It preserves its properties once dissolved.

Borax can be replaced with 100g of citric acid and 200g of baking soda. This proportion makes it possible to form sodium citrate, which will soften the water (trap the calcium ions), increase pH of the detergent, degrease, detach and reinforce the effectiveness of the soap.

### Utensils

2 old laundry detergent bottles of 2l

### Ingredients

80 g of castile soap chips without glycerin

100 g baking soda (bicarbonate)

75 g borax

**Alternative** to borax:

100 g citric acid

200 g baking soda

### Optional

Optional: 60 drops of essential oils (lavandin, lemon) to perfume or cologne. But the smell disappears of the clothes once they're dry.

To keep the essential oils scent and the moths away, it is best to pour a few drops on small pieces of cloths and spread them in the clothes piles. To be renewed every 2-3 weeks.

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# CLEANING

## Dishwasher Powder

**Preparation time:** **For** dishes in the dishwasher

5 minutes

### Instructions

**1:**

Mix the alkaline powders (borax or baking soda and percarbonate of soda, soda crystals and salt) with the essential oil in a hermetic jar.

**2:**

Keep the citric acid in a separate jar.

**3:**

When you are ready to use the dishwasher, put one tablespoon of the mix with one teaspoon of citric acid in the dishwasher product container. Adding salt or not can be discussed. If you add some, there is no need for regenerating salt unless the water is really hard. Salt has the advantage of an abrasive effect as long as it is not dissolved like baking soda.

### Notes

Dirty dishes are covered with grease and protein that water has to clean. Rinsing your dishes is a good habit as water already eliminates some of the dirt. It also helps to avoid bad smells in your dishwasher and you will have to clean the filter less often.

Alkaline ingredients (baking soda, borax) are effective to dissolve protein and grease. For limestone you need an acid ingredient to dissolve it.

Do not prepare too much of the mix in advance as the dehydrated soda crystals will get wet rapidly. If wet it loses its efficiency and can react with the acid. You would end up with a sticky and foamy powder.

Soda crystals are the most alkaline (pH 11-11.5), followed by borax (pH 9-9.5), then baking soda (pH 8-8.6). The latter is slightly abrasive. Soda crystals are the most degreasing. Borax is it, in addition, detaching because it releases oxygen peroxide in solution and in the presence of base and temperature.

If you do not want borax, you can replace with baking soda with sodium carbonate for the stain effect

### Utensils

2 hermetic jars

### Ingredients

200 g of borax

1200 g dehydrated soda crystals

50 g of coarse salt

1 teaspoon lemon essential oil

100 g citric acid

### Alternative to borax:

200 g baking soda

50 g percarbonate of soda

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# CLEANING

## Dishwashing liquid

**Preparation time:** 10 minutes  
**For** cleaning the dishes by hand

### Instructions

**1:**

Mix the water with the two soaps in a pan and warm it up until dissolved.

**2:**

Away from the heat, add baking soda, vinegar and crystal soda (in that order).

**3:**

Let the mix cool down and stir regularly. If it solidifies, mix it with a mixer and if needed add 1 glass of hot water.

Once the mix is cold add the essential oil and pour it into the bottle.

### Notes

This dishwashing liquid fates well thanks to soda crystals and black soap. These same soda crystals, in the presence of Marseille soap, will allow the mixture to thicken and become a gel. The final consistency will vary according to the composition of the soaps: it is sufficient to adjust at its convenience with a little hot water when the liquid is cold.

The foaming effect is provided by the Marseille soap and reinforced by the powder of SLSA (sodium lauryl sulphoacetate), a tension-active of natural origin from the coconut.

The presence of an acid (vinegar) and an alkaline ingredient (bicarbonate) causes momentary effervescence at the time of addition, but the resulting combination (a salt: sodium acetate) has a cleaning effect.

### Utensils

1 plastic bottle of 1liter

### Ingredients

1 liter of water

30 g shaved Castile (Marseille) soap

60 g black soap

2 teaspoons baking soda

2 tablespoons white vinegar

3 tablespoons crystal soda

1/2 teaspoon de SLSA

30 drop lemon essential oil

### Alternative

some people use castile soap (without glycerin) to wash the dishes.



### Did you know ?

Only four factories produce real Marseilles soaps according to the traditional method. They have joined the Union of Marseille Soap Professionals (The Horseshoe, the Seraglio, Ma-rius Fabre and the Savonnerie du Midi).

The genuine Marseille Soap is made from vegetable oils exclusively, has no added fragrance, no coloring, no preservatives and no additives.

For more information <https://www.savon-de-marseille-traditionnel.fr/>



# SOINS

## Dishwashing “cake”

**Preparation time:** 30 minutes  
**To** wash the dishes by hand

### Instructions

**1:**

Mix the SCS and SCI and melt them in a double boiler with the lemon juice and the vinegar. Stir from time to time until a soft paste is obtained.

**2:**

Add slowly the soda crystals and the baking soda, mix well.

**3:**

Once the mix is fluid remove from fire and add the essential oil. Mix well and pour the paste into the glasses.

Once completely cold and unctuous, add the essential oil, stir and fill the plastic bottle.

### Notes

This cake is the solid alternative of dishwashing liquid. It has the advantage of lasting much longer. On the other hand, it is more difficult to achieve since it is necessary to melt the surfactants in a water bath.

The mixture of two types of surfactants strengthen their respective action. SCS and SCI are of the anionic type, that is to say that they are particularly detergent, hence cleansers. The SCS can be irritating, that is why it is added SCI, better tolerated by the skin and whose superior foaming power.

The surfactants could be melted with water, but using vinegar and lemon, we take advantage of their descaling power. Soda crystals and bicarbonate desincrust and deodorize.

### Utensils

For two glasses with large openings

### Ingredients

100 g SCS Sodium coco sulfate

50 g SCI Sodium coco isethionate

20 g white vinegar

10 g soda crystals

10 g baking soda

2 tablespoons lemon juice

### Optional:

80 drops of citrus essential oils (lemon, orange, grapefruit) or tea tree.

### Alternative

some people use castile soap (without glycerin) to wash the dishes.



# CLEANING

## Scrub cream

### Preparation time:

10 minutes

**For** cleaning very dirty pans and stainless steel sink

### Utensils

1 plastic bottle of 7 dl

### Ingredients

350 g calcium carbonate

280 g water

35 g baking soda

20 g soda crystals

7 g SLSA or SCS (diluted in lukewarm water)

4 drops of Cosgard

### Optional

15 drops of essential oil of balsam fir and 15 drops of essential oil of eucalyptus radiata

### Instructions

**1:**

Mix the ingredients slowly.

**2:**

Pour the mix into the plastic bottle.

**3:**

Shake well before use.

### Notes

This scrub cream does wonders on a stainless steel sink or on very dirty pots, lawn chair or any other resistant and very dirty material. You won't have to use a steel pad that can damage or leave marks on certain surfaces.

The foaming effect is provided by the powder of SLSA (sodium lauryl sulphoacetate), a surfactant of natural origin derived from coconut. If using SCS (sodium coco sulfate, also derived from coconut), dissolve it in warm water before mixing with calcium carbonate.

Soda and bicarbonate crystals clean, descale and deodorize.

With each use, it is necessary to strongly shake the bottle, in order to re-put the carbonate powder in suspension. It tends to sink to the bottom and agglomerate.



# CLEANING

## Chantilly de karité pour le corps

### Preparation time:

10 minutes

**For** cleaning, degreasing and descaling all surfaces (except marble).

### Utensils

A recycled and clean spray bottle.

### Instructions

**1:**

Heat the water with the sodium coco sulfate SCS until dissolved.

**2:**

Away from fire, add the citric acid, then the alcohol.

**3:**

Add the essential oil. Shake well before use.

### Ingredients

650 ml water

50 g Sodium coco sulfate SCS

150 g citric acid

120 g 70° alcohol (or cheap 40° vodka)

### Optional

30 drops of citrus essential oil (orange, grapefruit, lemon)

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### Notes

The citric acid descales all surfaces but do not use it on marble, a limestone mineral.

The surfactant degreases. The alcohol disinfects and prevents traces once the surface is dry.

Lemon and grapefruit essential oil are powerful disinfectant.



# CLEANING

## WC Gel

### Preparation time:

5 minutes

**For** cleaning and descaling the toilets

### Instructions

**1:**

Dissolve the citric acid in warm water.

**2:**

Add the guar gum by sprinkling, and stir well with the whisk (or better, with the mixer dipping) until disappearing of lumps and formation of the gel.

**3:**

Add the essential oil.

**4:**

Fill your bottle with a soft tipped bottle (collected in a hair dye package, or found in a DIY store)

### Notes

The toilets have to be clean. This gel can compete with industrial gels that are full of chemicals. Slightly jellified, it sticks to the toilets. You can let it sit for 5-10 minutes before scrubbing with the toilet brush.

Because nothing can replace "elbow oil" which is free! To clean, it is still necessary to rub with a brush.

The filling of the elbow neck bottle is delicate. The gel does not go well through the funnel. It is preferable to recover a soft vial with tip for transfer.

### Utensils

1 recycled bottle

### Ingredients

600 ml warm water

1 cup of citric acid

2 teaspoons of guar or xanthan gum

30 drop of essential oil of your choice (to choose from the disinfectant oils)

- Lemon
- Pine
- Mint
- Tea tree
- Eucalyptus

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# CLEANING

## Potty Bombs (washing-up stones)

### Preparation time:

10 minutes

### Drying time:

3-4 hours

### Instructions

#### 1:

Mixed the powders well with a fork.

#### 2:

Mix the liquids.

#### 3:

Add the liquid\* in small amounts and mix well with the fork every time.

#### 4:

Once the mix start to solidify between your fingers, stop adding liquid. Do not add the liquid at once! Press the mix into the molds.

#### 5:

Dry at 35° in a rotating heat oven or in a dehydrator for 3 to 4 hours. Unmold and store in a closed container.

### Notes

Potty bombs smell good! But more importantly they descale and whiten the toilets. Thanks to disinfecting power of the essential oils, cleaning the toilets has never been easier!

If the mix starts to swell, it means that the reaction between acid and base has started. To stop it, add a little bit more powders.

\* Adds the liquid little by little because it depends on the viscosity of the liquid used. If the mixture begins to swell, the reaction between acid and base has started. To stop it, add a few more powders.

**For** descaling and whitening the inside of the toilets.

### Utensils

Pretty soft molds or an ice mold.

### Ingredients

2 cups of baking soda

1/2 cup of citric acid

1 tablespoon of dishwashing soap mixed with the following essential oils

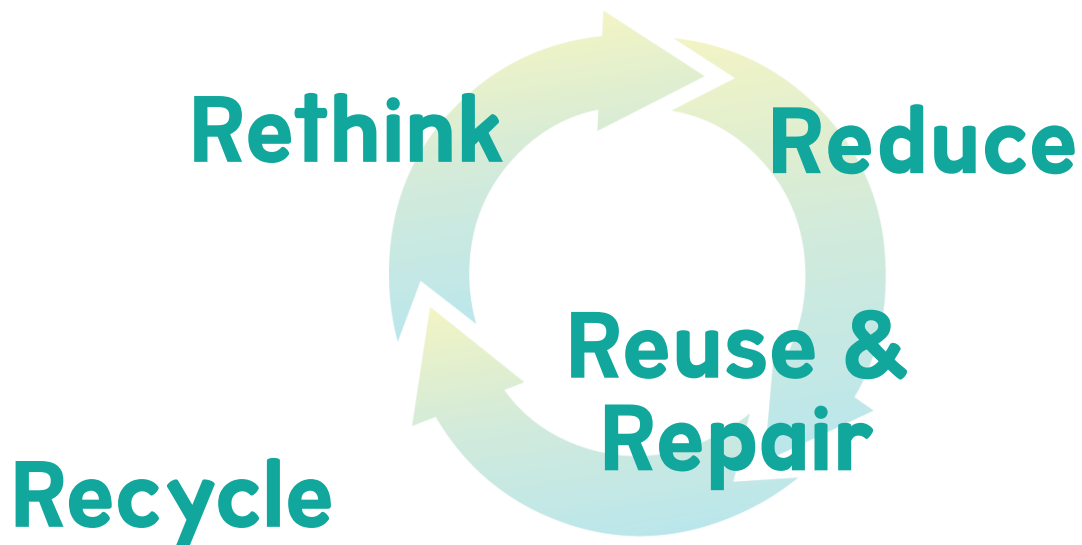
15 drops of lemon

10 drops of tea tree

15 drops of balsam fir

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Les fondements de l'association

**ZERO WASTE**  
SWITZERLAND

**Réfléchir**... à notre façon de consommer, à nos achats automatiques

**Réduire**... le superflu et l'inutile

**Réutiliser et réparer**... ce dont nous nous servons ou ce que nous utilisons

**Recycler**... afin d'éviter de remplir nos poubelles

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