



# EARTH WISE

## CLEANING GUIDE



# Why Clean?

Believe it or not, studies show that a clean and well-maintained home can lower stress, resulting in improved overall wellbeing. Trying to get it that way may be another story, especially if you have kids or pets. There are many other benefits of a clean home:

- Sweeping, dusting, and vacuuming will decrease dust, pet dander, and other allergens.
- Vacuuming and mopping, and ensuring ventilation and filtration systems are in working order reduces air pollution and improves indoor air quality.
- Regular maintenance on appliances and utilities (e.g. furnace, water softener) ensures they are operating efficiently and extend their lifespan. This saves you money on replacement and energy costs, and keeps these items from accumulating in the landfill.

## Where to Start?

With one thing at a time! Trying to do too much at once can be overwhelming. Also, if you change too many products at the same time, and you have a reaction to something, you won't know which agent was the culprit!

### STEP 1: Declutter

Purging closets, cupboards, and storage areas will immediately make your home look and feel cleaner and more organized. Most items can be donated, repurposed, or recycled. The [Cariboo Regional District](#) has up-to-date information on what can be recycled in our area.



*Waste Wise tip: Decluttering is also great for the fridge! Use an "eat me first" bin to reduce food waste, and keep the fridge looking tidy and clean. On average, British Columbians toss out 25% of all groceries we purchase!*



### STEP 2: Clean

Once you have reduced clutter, it's time to clean! In technical terms, cleaning is the mechanical action that removes dirt, gunk, and microbes from the surfaces in your home. Cleaning reduces the number of pathogens in your home and the risk of spreading infection. A mixture of mild soap and water is effective at reducing microbes, dirt, and mould without the need for more harsh disinfectants.



*Water Wise tip: Running water continuously to rinse an item wastes excess water. Elbow grease will work just as well, giving you extra exercise and saving water.*



### STEP 3: Disinfect

Thorough disinfecting eliminates microbes and pathogens, as well as helpful bacteria in your environment, therefore not every surface in your home requires disinfecting. Exposure to infections during childhood provides a good defense to allergies later in life, aka the "[Hygiene Hypothesis](#)". The main areas to focus on are food preparation surfaces, high touch surfaces such as doorknobs and handles, light switches, and faucets. It is suggested that disinfecting certain surfaces shortly after contamination is more effective than doing so frequently. Disinfecting alone will be less effective than if you clean first.

[Check out this article from BBC Future on disinfecting practices.](#)

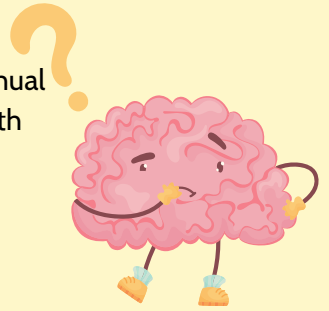
## Tools of the Trade

It may seem silly but carefully choosing your cleaning tools can also help reduce household waste. Swapping out recycled textiles for paper towel, reusable dusting cloths for disposable dusting cloths, and reusing old toothbrushes for cleaning are just a few ways to accomplish this. When choosing your cleaning tools, take a minute to decide if there is a more sustainable option!



# Cleaning Products: What to Use?

Many commonly used household cleaners are effective and reduce manual cleaning efforts, but contain ingredients that can be harmful to our health and the environment (including waterways), or require a lengthy and harmful mining or manufacturing process.



How to choose: general rules of thumb! Look for:

- Terms like "solvent-free", "no petroleum-based ingredients" or "no phosphates"
- Look for products that include a list of ingredients and contact information
- Avoid products that list phosphates, nitrogen, ammonia, and surfactants on the label
- 3rd party certifications, such as EcoLogo, Green Seal, OMRI, or our Water Wise logo!



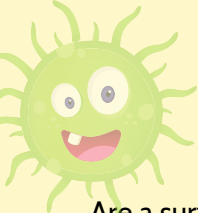
*Waste Wise tip: Refill stores have a variety of ready made, eco-friendly cleaning products saving you time and letting you ditch disposable plastic containers!*

## What's the Big Deal About Cleaners Anyway?!

Use of commonly made household cleaners can be appropriate and sometimes necessary. The goal of this guide isn't to tell you to stop using all cleaners, but to consider whether or not they are needed for every job. If you are interested in learning more about cleaning agents, there is a wealth of information on these products and their ingredients. Before you know it, you'll have done enough research to earn a degree in chemistry!

The following is a list of just a few of the ingredients that are considered harmful to the environment, including waterways.





## Sulfates

Are a surfactant, meaning they break up dirt to make it easier to scrub off surfaces. Excessive use in cleaning products has led to discharge of highly contaminated wastewaters in aquatic and terrestrial environments aka sodium laureth sulfate, alkylbenzenesulfonate.

Some eco-friendly products contain a "non-ionic" surfactant which is plant-based and biodegradable, making it safer for the environment.

## Bleach

Kills bacteria and viruses, brightens and whitens laundry, removes stains on multiple surfaces. Highly reactive and unstable, however there are limited studies available on how it breaks down and reacts with compounds in the environment. Manufacturing of bleach is a lengthy and dangerous process.

## Ammonia

Effective at breaking down grease and grime without leaving streaks. Can be toxic to aquatic life in high concentrations.

## Borax

Softens hard water, removes stains, mould, and mildew, decreases odors. helps to whiten laundry. While borax is a naturally occurring mineral, it is mined, which is hard on the environment. It can be hard on the lungs, and potentially toxic, especially to children.

## Phosphates

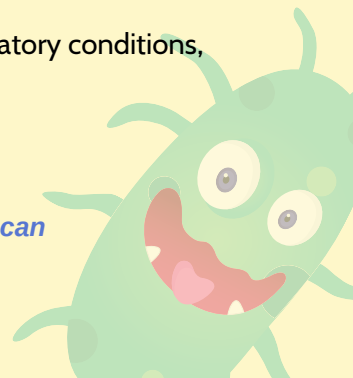
"Soap scum" is created when surfactants in cleaners bind with calcium or magnesium in water. Phosphates bind to these minerals, allowing the soap scum to dissolve in water and wash away. This also decreases the amount of surfactant lost as soap scum, allowing you to use smaller quantities, and creating a more efficient cleaning product. Phosphates cause nutrient pollution and feed and stimulate algae growth in waterways which choke out aquatic life.

## Fragrance

Added to cleaning products to improve their smell. Associated with respiratory conditions, allergies, and headaches.



***Water Wise tip: Read labels carefully for disposal instructions. Pouring chemicals (including cleaning agents) down the drain can be harmful to waterways and aquatic life.***



# RECIPES!!!

The David Suzuki Foundation has several resources for lowering your carbon footprint, including these Green Cleaning Recipes created by the [Queen of Green!](#) To save you some time and effort, we have tested these recipes and provided our thoughts so you know what to expect.

## *Powdered Laundry Soap*

*Use 1-2 tbsp per full load*

1 cup soap granules  
1/2 cup baking soda  
1/2 cup washing soda  
10 drops essential oil (optional)

Combine dry ingredients. Stir in essential oil.

To soften fabrics - pour 1 cup white vinegar into rinse cycle (NOT wash cycle).

## *Liquid Laundry Soap*

*Use 1/2 cup per full load*

7 litres water  
1 cup soap granules  
1/2 cup baking soda  
1/2 cup washing soda  
20 drops essential oil (optional)

Add 1 L water and soap granules to pot. Heat until diluted. Pour into pail with 6 L water, baking soda and washing soda. Stir until dissolved and add essential oil. Soap will gel as it cools. For hard water add more washing soda.

## *Borax-Free Liquid Laundry Soap*

*Use 1/2 cup per full load*

7 litres water  
1 cup baking soda  
1 cup liquid castille soap  
1/3 cup coarse salt

Dissolve dry ingredients in hot water. Add soap and stir.

Each one of these recipes performed very well, even in cold water. The Powdered Laundry Soap was way less messy! The Powdered Laundry Soap recipe suggests using vinegar to soften fabric but this can deteriorate the rubber seals in your machine with regular use so you may want to skip this step. Washing soda will accomplish the same goal so you may find you don't need the vinegar. Soap granules can be made by grating or processing your favorite bar soap. Laundry recipes can work differently in different types of water, i.e. hard vs. soft, so keep this in mind when trying them out!

## *Bonus Recipe: Ceramic Stove Top and Oven Cleaner*

Sprinkle stovetop or oven with baking powder, cover with a hot tea towel with dish soap and let sit for 20 minutes. Scrub clean and polish with vinegar and water!

*It may be tempting to make your own  
cleaners, but do your research first!  
Combining ingredients can be dangerous,  
ineffective, and create toxic gases.*

### *All-Purpose Spray*

*For tubs, tiles, counters, microwaves, floors, etc.*

1 gallon hot water  
1/2 cup liquid castille soap  
10 drops essential oil (optional)

Combine ingredients, pour into a spray bottle.

Thyme essential oil is a powerful weapon against germs.

### *All-Purpose Scour*

*A non-abrasive for tubs, tiles, sinks, etc.*

1 2/3 cups baking soda  
1/2 cup liquid castille soap  
1/2 cup water

Combine.

Pour into squirt bottle and shake before use. Rinse well.

### *All-Purpose Powder*

*As effective in dishwashers as it is on toilets. For dishwashers: add dry ingredients to soap dispenser and vinegar to rinse dispenser.*

1 2/3 cups baking soda  
1/2 cup liquid castille soap  
1/2 cup water

Combine.

Pour into squirt bottle and shake before use. Rinse well.

The All-Purpose Spray works exactly as expected and can be used for every surface. For cleaning floors, about a 1/4 cup of liquid castille soap in 6 litres of hot water does the job, and is safe for hardwood floors. The All-purpose Scour worked well but once it was left to sit between uses, it clogged up the sprayer. To fight mould and mildew, add 1/4 cup coarse salt to this mixture! The All-Purpose Powder did an excellent job in both the dishwasher and the toilet. Unfortunately, the use of vinegar in the dishwasher is not recommended as it can damage the rubber seal, so may not be a good long term switch for dishwasher soap.

### *Stainless Steel Cleaner*

*Removes smudges from stainless steel appliances.*

1 tbsp olive oil  
1 tbsp White Vinegar

Drip olive oil onto a rag. Rub surface to get rid of smudges. Drip white vinegar on other inside of rag. Wipe and let dry.

### *Glass and Mirror Cleaner*

*Wipe with newspaper to avoid streaks.*

1/2 cup white vinegar  
1/2 cup water

Pour into spray bottle.

Before switching to this green cleaner, clean up the waxy residue traditional brands leave behind with a 5% rubbing alcohol-to-water solution.

### *Furniture Polish*

*Since wood finishes vary, do a test patch.*

2 cup warm water  
2 tbsp olive oil  
2 tbsp white vinegar or lemon juice

Pour into spray bottle. Shake well, spray, rub, and polish with rag.

The Stainless Steel Cleaner left some streaks and was a bit finicky. The Glass and Mirror cleaner worked well for windows, but was also effective on the stainless steel surfaces and much more efficient. The Furniture Polish recipe worked well, but if you want to use the lemon juice, try storing it in the fridge between uses to make sure it doesn't spoil.

\*Vinegar is an excellent cleaner and disinfectant, but do research the surface you plan to use it on as it isn't great for some surfaces such as rubber seals and stone!