

## A Word of Caution About Vinegar and Castile Soap

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Dr. Bronner's Castile soap and vinegar can clean an entire house. They are effective, versatile, biodegradable and non-toxic. **But the sole point of this post is to emphasize that these two should not be mixed directly.** This is true for the Castile soap and any acid – any vinegar or lemon juice.

Since there have been several recommendations in online recipes and on TV to mix these two together, I want to address this topic. It's not a dangerous combination, but it's definitely moving in the wrong direction as far as getting things clean.

## Here's why.

In great part it's due to the fact that vinegar is an acid and the Castile soap is a base. They will directly react with each other and cancel each other out. So, instead of getting the best of both (the scum cutting ability of the vinegar and the dirt transporting ability of the soap), you'll be getting the worst of something entirely new. The vinegar "unsaponifies" the soap, by which I mean that the vinegar takes the soap and reduces it back out to its original oils. So you end up with an oily, curdled, whitish mess. And this would be all over whatever it was you were trying to clean – your laundry or counters or dishes or whatever.

Check out this picture of <u>Dr. Bronner's Peppermint Castile soap</u> mixed directly with distilled white vinegar:



It doesn't matter what else is in the solution, or in what order you combine them. If you end up with the soap and the vinegar in the same container, this reaction will occur. The only exception to this is if you buffer the soap with baking soda, which is another alkali. You'll see this in my recipe for GIY Soft Scrub. In this case, vinegar reacts more readily with baking soda, and that reaction will take place first. For the Soft Scrub, it serves the purpose of creating that lovely, vertical clinging foam. If there is still unreacted vinegar, it will then react with the soap, which is why the ratios are important to maintain.

The mom in me has to point out that if you have kids who wonder about the purpose of science class in "the real world", you can show them this little reaction. Of course, drinking milk and orange juice at the same time will also point out why you should know your acids from your bases.

## So, for cleaning, there is a better way. Use the soap to clean and the vinegar as a rinse agent.

One common complaint with using the Castile soap, especially on hard or shiny surfaces is that it leaves a film behind. This film is caused by the soap reacting with minerals in the water. It is not actually soap itself left behind, but rather certain salts. When this builds up on sinks and tubs, we call this <u>soap scum</u>. Vinegar is a great way to cut this. So after you've handwashed your dishes with Castile soap and rinsed them, dip them in a sink of vinegar water. Or after you've wiped

down the sinks and tubs with soapy water, rinse, and then spray with a vinegar solution (about 1 cup vinegar/quart water).

I'll give more time to <u>windows</u> later (one of the things I actually really enjoy cleaning), but briefly, for <u>dirty exterior windows</u>, spray them with my <u>Castile soap solution</u>, wipe them with a chamois, then spray them with vinegar and squeegee. Works great! Better than Windex.

Also, on the hair, if you do not have our <u>Citrus Hair Rinse</u>, but just want to use vinegar or lemon juice, rinse the soap out of your hair first. Then apply the vinegar or lemon juice.

## So Dr. Bronner's Castile soap and vinegar are a fabulous one, two punch. One after the other. Not at the same time.

As a sidenote: This issue does not apply to combining <u>Sal Suds</u> with vinegar. Sal Suds, as a synthetic detergent, has a completely different chemical makeup and does not react with the vinegar in the same way. Vinegar would even add more degreasing power to the mixture.